



Final

Radiological Characterization Survey Report Building 5

**Alameda Point
Alameda, California**

June 7, 2012

Prepared for:

**Department of the Navy
Base Realignment and Closure
Program Management Office West
San Diego, California**

Prepared by:

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Prepared under:

**Naval Facilities Engineering Command Southwest
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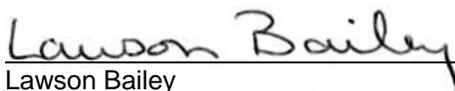
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REVIEW AND APPROVAL



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June 7, 2012
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ACRONYMS AND ABBREVIATIONS

$\mu\text{R/hr}$	Microroentgens per hour
ϵ_i	Instrument efficiency
Δ/σ	Relative shift
BRAC	Base Realignment and Closure
cm	Centimeter
cm^2	Square centimeter
cpm	Counts per minute
Cs-137	Cesium 137
dpm	Disintegrations per minute
DQO	Data quality objective
DU	Depleted uranium
EPA	U.S. Environmental Protection Agency
ft^2	Square feet
H-3	Tritium
HRA	Historical radiological assessment
LAW	Large area wipe
m^2	Square meter
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
MSI	Millennium Services, Inc.
NaI	Sodium iodide
NAS	Naval Air Station
Navy	Department of the Navy
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
N/S	Not surveyed
pCi/g	Picocuries per gram
PSPC	Position sensitive proportional counter
Pu-239	Plutonium 239
Ra-226	Radium 226

ACRONYMS AND ABBREVIATIONS (CONTINUED)

RASO	Radiological Affairs Support Office
ROC	Radionuclide of concern
RSOR	Radiation Safety Officer Representative
SIMS	Survey information management systems
SCM	Surface contamination monitor
SOP	Standard operating procedure
Sr-90	Strontium 90
SU	Survey unit
TSP	Task specific plan
VSP	Visual sample plan
Weston	Weston Solutions, Inc.

EXECUTIVE SUMMARY

Building 5 at former Naval Air Station (NAS) Alameda was built in 1940 and was remodeled and added to many times. Building 5A was added to the footprint adjacent to the north side of Building 5 separated by an east-west breezeway running the length of the buildings. In its final configuration, Building 5 occupies an area of more than 910,000 square feet (ft²). A mezzanine runs east and west down the center of the building spanning both Building 5 and 5A, again separated by the east-west breezeway. Building 5 served as the Overhaul and Repair Shop. Radium dial painting facilities were set up in three different locations in the center section of the mezzanine over the years from 1941 through the mid-1950s. Previous surveys have detected radium-226 (Ra-226) contamination in several different rooms on the mezzanine of Building 5. Drain piping from the mezzanine was contaminated by disposal of liquid radium waste. The drain piping was connected directly to the storm drain system on the west side of the building. The known to be contaminated drain piping and portions of the storm drain system have been subsequently removed and properly disposed of. Additionally, tritium (H-3) exit signs were stored in the former X-ray room on the first floor. A fixed scope survey has been conducted in areas identified as impacted by radium dial painting operations and storage of tritium exit signs. This characterization report addresses those surveys performed in areas potentially impacted by Ra-226 and H-3.

Based on the recommendation of the Alameda Historical Radiological Assessment (HRA) (Weston Solutions, Inc. [Weston 2007]), a radiological survey was performed to confirm that areas within the scope of this survey within Building 5 are now free of radioactive materials associated with historical Navy activities or to identify locations of residual contamination in support of remedial actions and further survey. This report documents the survey design, approach, data, and analysis to support a conclusion of release for unrestricted use or to identify areas of contamination that require remedial actions and subsequent re-survey within those areas impacted by Ra-226 and H-3.

Surveys were performed in the Radium Paint/Instrument Shops on the second-floor mezzanine identified in the HRA as having been associated with handling instruments with radioluminescent dials. Restrooms in the area, hallways, stairs, and an elevator that were used for transporting instruments were included. Surveys were performed on the first floor including areas that may have been affected by the removal of drain piping from the radium paint rooms. Surveys on both levels included floors, lower walls, upper walls and ceilings in areas that were impacted, as well as floors and lower walls in buffer areas surrounding the impacted areas. Surveys include alpha surface scanning measurements, direct measurements, swipe surveys at defined and random locations of alpha and gamma radiation, and measurements of radioactivity in building drains. Wet smear surveys were performed in the former X-ray room and analyzed at an off-site laboratory for H-3.

The impacted area was subdivided into 66 survey units (SU), 65 within the area associated with Ra-226 and a single SU in the area that had contained the H-3 exit signs. Each SU contained multiple survey areas defined by the surface, floors, lower walls, upper walls and ceilings. The results of alpha surface radioactivity measurements collected in 65 SUs of Building 5 associated

with Ra-226 indicate that 29 SUs contain fixed surface activity above the release criterion of 100 disintegrations per minute (dpm) per 100 square centimeter (cm²) for Ra-226. Within those 29 SUs, activity above the release criteria was found on 43 separate surfaces. These 29 SUs require remediation and final survey or investigation to establish compliance with the release criteria. Sixteen of the 43 surfaces had Class 2 surveys therefore, less than 100% area coverage was performed due to lower potential for contamination to be present. These surfaces include upper walls, ceilings and a buffer area. A determination of the cause of the contamination and a reclassification of SUs are required for these 16 areas. Additionally, seven SUs were found to have removable contamination above the release criteria.

The former X-ray room was used to store a number of H-3 filled exit signs during the program to remove all signs containing radioactive material and replace with a non-radioactive model. The room was surveyed for H-3. No measureable H-3 was detected.

Of the remaining 36 SUs, four SUs had measurements slightly above background, but below the release criteria, and 32 SUs had only background levels of radioactivity present. The release criteria were not exceeded in any of these SUs.

Based on the results of these surveys, further characterization of these impacted areas needs to be performed.

1.0 SITE DESCRIPTION

Naval Air Station (NAS) Alameda was an active military installation from the 1930s to the 1990s, providing facilities and support for fleet aviation activities. NAS Alameda was selected for closure by Congress in September 1993 and was officially closed in April 1997. NAS Alameda is now known as Alameda Point.

1.1 BUILDING LOCATION AND DESCRIPTION

Building 5 was built in 1940 and was remodeled and added to many times. The expansion of Building 5 included a second, nearly equal sized structure, Building 5A, to the north of Building 5. The structures are connected at several locations at grade level allowing passage of labor, equipment and materials between the large hangar bays and repair facilities. In its final configuration, Building 5 occupies an area of more than 910,000 square feet (ft²). The building has a very high ceiling to accommodate aircraft and overhead cranes. A mezzanine runs east and west down the center of the building, spanning both Building 5 and 5a separated by a breezeway. The location of Building 5 at Alameda Point is shown in [Figure 1](#).

1.2 PRIOR HISTORICAL USE

Building 5 served as the Overhaul and Repair Shop from 1940 until Alameda Point was closed in 1997. Radium dial painting facilities were set up in three different locations in the center section of the mezzanine from 1941 through the mid-1950s. Previous surveys have detected radium 226 (Ra-226) contamination in several different rooms on the mezzanine. Remediation efforts were conducted to eliminate areas of known contamination. Drain pipes from the mezzanine were contaminated by disposal of liquid radium waste. The drain piping was connected directly to the storm drain system on the west side of the building. The drain piping and portions of the storm drain system have been subsequently removed and properly disposed of. One additional drain pipe from a sink in the vicinity of a former radium paint room in the northwest corner of the mezzanine has not been removed. Surveys of the internals of that pipe have not been completed to determine if it is a source of residual radioactivity. Depleted uranium (DU) counterweights were handled and stored on the main floor. Tritium (H-3) exit signs were stored in the former X-ray room on the first floor. Aircraft engines that had been exposed to nuclear test fallout were overhauled at former NAS Alameda in 1951. The exact on-site location of the overhaul is not known. However, Building 5 was one of three sites and facilities where engines were overhauled at former NAS Alameda. Radionuclides of concern associated with the engine overhaul are cesium-137 (Cs-137), strontium-90 (Sr-90) and plutonium-239 (Pu-239).

1.3 CURRENT AND FUTURE BUILDING OR LAND USE

Building 5 is currently vacant. The building may be leased to light-industrial tenants in the future.

1.4 REPORT OBJECTIVES

This report presents results of the surveys performed, and identifies areas of contamination that require remedial actions and subsequent re-survey of the areas of the 2nd floor mezzanine used as radium dial painting and facilities areas on the first floor below the mezzanine in Building 5. This report also details the procedures and results to facilitate unrestricted release of 32 survey units (SU) including the former X-ray room. Surveys of the first floor area where the potential for contamination due to overhaul of engines possibly exposed to fallout from nuclear weapons tests or the repair and maintenance of aircraft having DU counterweights are not within the scope of the initial characterization effort and are not addressed in this report.

2.0 HISTORICAL RADIOLOGICAL ASSESSMENT

The history of Building 5 was obtained from a Historical Radiological Assessment (HRA) (Weston Solutions, Inc. [Weston 2007]). Additional information was reported in the task specific plan (TSP), attached as [Appendix A](#). These documents are the primary references for the information presented in this section.

2.1 OPERATING HISTORY

Following construction of Building 5 in the early 1940's, production and maintenance of instrumentation containing radioluminescent dials and indicators was the principal use of radioactive materials. Initial dial painting facilities were located in the northwest corner of the central area of the mezzanine in Building 5. A large instrument shop was located immediately adjacent to the painting facility, used primarily for instrument assembly and disassembly. Primary means of moving instruments to and from aircraft located on the main floor was via an elevator or stairs located in the south central part of the mezzanine. Drawings dated 1946 identify a planned relocation of the radium paint facility from the northwest corner to the northeast corner of the central area of the mezzanine. The second location is at the eastern end of the large instrument shops. Both the first and second locations of the radium paint rooms as well as the large instrument shops between are bounded on the north by a wall with windows that today overlook the area above the breezeway between Buildings 5 and 5A. The area has a vaulted ceiling with large windows facing north. The design is conducive to natural circulation of air, with warmer air rising to exhaust out the upper windows, drawing cooler air in through the lower windows. The resultant air flow would make the lower window sill area an ideal location to dry newly painted instruments, a practice believed to have occurred based on previous surveys and remediation efforts on areas of the window sills.

In 1954, the radium paint facility was moved to the southeast corner of the central part of the mezzanine, an area better designed and equipped to control the use of the radioactive material. The previous radium paint facility in the northeast corner of the mezzanine area became the focus of tests conducted by the Navy to determine efficient and cost effective means of decontaminating areas impacted by radium dial painting operations. The new radium paint facilities were in operations for a short time until all operations with radioluminescent paint were

relocated to Building 400. During radium dial instrument operations in Building 5, the pathway to and from the aircraft remained the elevator and stairwell in the south central side of the mezzanine area.

In addition to the radium dial painting and maintenance operations, the radioactive material, or the potential for radioactive material on the first floor of Building 5 has been identified in the HRA. Following base closure in 1997, two drain lines from the radium paint facilities known to have contained radium wastes were removed. The drain lines penetrated the floor of the mezzanine, traversed the first floor area beneath the mezzanine and ran under the concrete floor to an exterior drain line. Removal of those lines has exposed a portion of the first floor to radium contamination.

The main function of Building 5 has been the maintenance and overhaul of aircraft. Aircraft containing DU counterweights have been within the maintenance areas of the first floor. Additionally, historical records indicate that two aircraft that were exposed to nuclear fallout during atmospheric tests in the early 1950s were brought to NAS Alameda for engine overhaul. The exact location of the overhaul is not known, but Building 5 was one of three engine overhaul facilities available at the time.

Finally, following base closure, efforts were made to collect all building exit signs that contain H-3. The signs were collected and stored in a room formally used for radiography of aircraft components. The former X-ray room is located on the first floor of Building 5, near the southeast corner.

Although other radionuclides may be present on the first floor, this report addresses those areas affected by Ra-226 and H-3.

2.2 MULTI-AGENCY RADIATION SURVEY AND SITE INVESTIGATION MANUAL CLASSIFICATION

Building 5 was divided up into three general areas; former radium paint shops, first floor areas, and the former X-ray room. These three areas are discussed below in regards to Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) classification.

Former Radium Paint Shops

The former radium paint shops are on a mezzanine level that runs east and west through the middle of the Building 5. All former radium paint shop and instrument shop rooms on the mezzanine are Class 1 areas, requiring a 100 percent scan survey of floors and walls to a height of 6 feet. The hallways, men's and women's rest rooms along the south side of the instrument shops, as well as an elevator and stairwell leading to the first floor are also Class 1 areas. The northern edges of the paint shop and instrument shop areas have windows about 35 inches above the floor essentially the entire length of the area. Past surveys, prior to this effort, have been performed resulting in attempts to remediate the sill surfaces. However, the outside sills have

not been surveyed. Therefore, the outer sills were surveyed as a Class 1 area. The outer walls below the sills were surveyed as a Class 2 area. Ventilation outlets (on the outside of the building) leading from the former radium paint shop rooms are Class I surveys.

Upper walls (above 6 feet) and ceilings in rooms designated Class 1 require only a Class 2 survey, and 50 percent of the upper walls and ceilings were surveyed in these Class 1 rooms. Class 2 scan surveys were performed on the floors and walls to a height of 6 feet in buffer areas.

Figure 2 identifies the former paint shop rooms, buffer areas, and designated survey units on the mezzanine floor.

First Floor Areas

The first-floor area beneath the radium paint shops originally housed the small parts paint shops. The ceiling in the area is approximately 24 feet high. The paint shops have been removed. Figure 3 identifies the first-floor areas beneath the radium instrument shop rooms, buffer areas, and designated survey units. The radium paint shop drain lines that penetrated into the paint shops have been removed from the area prior to this survey. It is unknown if radiological controls were in place during the removal of the paint shops and drain lines. The northeast corner of the area is at column line 13. The area is bounded by column line 13 on the east, column 8 on the west, the wall adjoining the breezeway on the north, and the wall separating the area from the large hangar bays on the south. This was surveyed as a Class 1 area. Figure 4 shows the area and the construction column lines. Walls to 6 feet were surveyed as a Class 1 area. The areas were subdivided into survey units not to exceed 100 square meters (m²). Additionally, a 6-foot-wide strip of both the north and east walls adjacent to the northeast corner, directly below the drain pipe penetration, was surveyed as a Class 1 area. Similarly, a 6-foot-wide strip on the south wall beneath the second penetration was surveyed as a Class 1 area with 6-foot Class 2 buffer areas on both sides.

Class 1 areas on the ceiling included a 6-foot by 6-foot area in the northeastern corner around the first penetration and an approximately 12-foot by 6-foot area surrounding the second penetration. A 6-foot buffer surrounds each Class 1 ceiling area.

The western end of the former small parts paint shops, extending from column 2 to column 4 and located directly under the stack area on the mezzanine, was surveyed as a Class 1 survey area. One hundred percent of floors and walls below 6 feet were surveyed. Each former paint booth, defined by concrete divider walls, is a unique survey area. A 6-foot Class 2 buffer was surveyed above the Class 1 wall areas.

Former X-ray Room

The former X-ray room in the southeast corner of the Building 5 shown in Figure 5. The former X-ray room has been used for storage of H-3 exits signs. The low-energy beta particles emitted by H-3 cannot be detected with scan survey equipment because of the Mylar covering over the

detector chamber. Thus, using scan survey equipment is not an effective means of surveying for H-3. Therefore, swipe surveys in the former X-ray room were obtained and analyzed for H-3. The former X-ray room floor and walls less than 6 feet was surveyed as a Class 1 area. The walls above 6 feet and the ceilings were surveyed in the same manner as a Class 2 area.

2.3 RADIONUCLIDES OF CONCERN

As identified in the HRA ([Weston 2007](#)), the isotopes of concern are Ra-226 on the second-floor mezzanine and areas below the radium instrument shops and H-3 in the former X-ray room and DU, Cs-137, Sr-90, and Pu-239 on the remainder of the first floor. This characterization report addresses only those areas affected by Ra-226 and H-3.

3.0 RELEASE CRITERIA

Limits on residual contamination for the radionuclides of concern (ROCs) are discussed below. These limits, or release criteria, refer to standards for release of Building 5 from radiological controls, allowing unrestricted use.

3.1 UNRESTRICTED RELEASE CRITERIA

The contamination release criteria for building surfaces (floors and walls) are 100 alpha disintegrations per minute (dpm) per 100 square centimeters (cm²) for Ra-226 and 5,000 dpm per 100 cm² for H-3 (Department of the Navy [[Navy 2006](#)]). The removable release criteria are one-fifth of the total activity limits ([Navy 2006](#)).

3.2 INVESTIGATION LEVELS

Investigation levels for the alpha direct surveys and removable surveys were equal to the release criteria for the more restrictive isotope of concern in each area surveyed.

4.0 SURVEY DESIGN

The survey consisted of alpha scanning and direct measurements at defined and random locations of alpha and gamma radiations and removable alpha and beta radioactivity. Details on the survey methods are provided in the TSP, attached as [Appendix A](#).

4.1 OBJECTIVE OF SURVEYS

The objective of the surveys was to evaluate whether residual radioactivity levels from historical Navy activities in Building 5 are less than the predetermined release criteria or to identify those areas that require remedial action and re-survey. When the survey demonstrates that the objective for release has been met, the null hypothesis was tested for residual contamination that

exceeded the release criterion. Areas that did not meet the release criteria are documented and marked in the field.

4.2 SURVEY UNITS

SUs have been identified based on area footprint to allow depiction on 2 dimension figures. As described in the Work Plan ([ChaduxTt 2010](#)), areas to be surveyed within each SU may consist of floors, lower walls, upper walls and ceilings. References to SUs are directed to the footprint area. All surveys performed within Building 5 will reference the SU and the specific surface, floor, lower wall. SU 1 through 60 are located on the first and second floor of Building 5 and are shown in [Figures 2, 3, and 5](#). SUs 1 through 27 and 41 through 60 are on the second-floor mezzanine, which was used as the radium instrument shops. All of these survey units contain Class 1 areas, except SUs 27 and 59, which are Class 2 buffer areas at the west and east ends of the mezzanine. SUs 28 through 40 are on the first floor beneath the radium instrument shops mezzanine. These SUs contain Class 1 survey areas with the exception of SUs 34 and 40, which contain only Class 2 areas. The walls from 6 feet to 12 feet above the floor level in SUs 28 through 33, and SUs 35 through 39 are also Class 2 areas.

The Class 1 areas consist of the floor and walls below 6 feet. All Class 1 areas are sub-divided if the total area of the floor and lower walls exceeds 100 m². Upper walls and ceilings in the Class 1 areas are surveyed as Class 2 areas. A summary of the area classifications is provided in [Table 1](#), and a layout drawing showing the SUs on the second floor is provided as [Figure 2](#). Detailed drawings of each SU are shown in the TSP, [Appendix A](#). All surveys were performed as required by the TSP. Documentation of the surveys followed the survey unit structure designed in the TSP with the exception of two survey unit surveys discussed in [Section 5.4](#).

4.3 REFERENCE AREAS

Reference areas were selected inside Buildings 112 and 398 to define a “background” activity level associated with a specific building material. These buildings are of similar construction. Media surveyed for reference consisted of concrete floors and walls, sheetrock and drywall, cinder block walls, glass windows, steel doors and walls, and painted wood. Buildings 112 and 398 have no history of radioactive material use ([Weston 2007](#)). Reference survey method descriptions and documentation are provided in [Appendix B Alameda Point Basewide Radiological Surveys Final Status Survey Reports Reference Area Survey Results](#) (Millennium Services Inc. [[MSI 2012a](#)]). The reference area values were applied to measurements obtained with hand-held instruments (Ludlum 43-68 detectors with Ludlum 2221 ratemeters). Measurements taken with the surface contamination monitor (SCM) do not subtract background because of the short count intervals and the analysis logic described in [Section 6.3.2](#).

4.4 STATISTICAL TESTS

The release criteria are applied to every 100 cm² measurement. The application is purely a pass/fail comparison. Therefore, no statistical tests are applied to the final data. However,

probability of detection theory has been applied to field measurements because of the low release criteria for Ra-226 and the randomness of decay during short intervals. The theory, based on the statistical nature of radioactive decay, is defined in Appendix J of the MARSSIM guidance (Nuclear Regulatory Commission [NRC] 2000) and further discussed in Section 6.3.2 and in Appendix A of this report.

4.5 DETERMINING THE NUMBER OF DIRECT MEASUREMENTS

Equation 4-2 of the work plan (ChaduxTt 2010) was used to calculate the number of direct measurements, N, to be collected per SU when the contaminant is not present in background:

Equation 4-2 from the work plan (ChaduxTt 2010)

$$N = \left(\frac{(Z_{1-\alpha} + Z_{1-\beta})^2}{4(\text{Sign } \rho - 0.5)^2} \right) (1.2)$$

Where:

N = Number of data points

$Z_{1-\alpha}$ = Type I decision error level, 1.645

$Z_{1-\beta}$ = Type II decision error level, 1.645

Sign ρ = random measurement probability, 0.945201

1.2 = 20 percent increase in number of samples over the minimum

The values used in the calculation were from MARSSIM guidance (NRC 2000) and were based on a recommended value for the relative shift (Δ/σ) of 1.6. Type I and Type II decision errors were based on 0.05 false negative and 0.05 false positive rates. The associated Z values were obtained from MARSSIM Table 5.2 (NRC 2000). The random measurement probability, Sign ρ , is from MARSSIM Table 5.4 (NRC 2000).

The calculation results in a value of N = 16.38. Therefore, a minimum of 17 direct measurements were obtained in each SU. The scanning minimum detectable concentrations (MDC), discussed in Section 6.6 and presented in Table 2 Detection Sensitivities, are below the release criteria; therefore, recalculation of the value of N is not required in accordance with MARSSIM guidance, Chapter 5, Figure 5-3.

5.0 FIELD ACTIVITIES

Other field activities were carried out in addition to the radiological surveys. These activities include mobilization, initial clearance and SU mark out, and asbestos abatement. All activities are discussed in this section.

5.1 MOBILIZATION

Mobilization for the Building 5 survey began in October 2010 by Millennium Services, Inc. (MSI), the survey contractor. The TSP for the survey, provided in [Appendix A](#), was reviewed by survey staff during the initial training. Training on the safety plans was also conducted, as was a briefing by the project Radiation Safety Officer Representative (RSOR), who provided dosimetry to survey staff.

5.2 INITIAL CLEARANCE AND SURVEY UNIT MARK OUT

Work began with a building walk-through conducted by health and safety personnel. The walk-through was performed to ensure personnel working inside the building would not encounter any unsafe situations and to estimate the amount of debris to be removed for proper disposal. Building surveys, including a walkover gamma survey using a sodium-iodide (NaI)-based microR meter and large area wipes (LAW), were performed to verify that work areas were clear of loose radioactive contamination and elevated radiation levels and that no radiation work permits were necessary. The gamma walkover surveys identified no areas greater than 4 to 12 microrentgens per hour ($\mu\text{R/hr}$). Gamma readings were relatively uniform throughout each SU. The higher readings are associated with tiled restrooms and confined areas with concrete walls. Finally, SUs were identified, marked, and gridded.

Using a random start point identified in the TSP, the systematic data collection fixed-point locations were laid out in a triangular grid pattern for the SUs, using the computer process provided by Visual Sample Plan (VSP) ([Gilbert and others 2001](#)). The number of data collection locations exceeded the required 17 in several areas as a result of the selection of the random start point and the need to keep the spacing between points at a maximum value.

5.3 ASBESTOS ABATEMENT ACTIVITIES

MSI mobilized an asbestos abatement contractor to remove asbestos-containing materials in the building that impeded the survey of original surfaces. These materials, including floor tiles, were properly disposed of as assumed low-level radioactive waste. No ventilation ducts or drains were found that contained asbestos. The walls and other construction materials that were installed after the radium dial painting instrument shops were relocated to Building 400 in the 1950s were removed, as necessary, to gain access to the original building surfaces. In all areas containing suspended ceilings, suspended ceilings were removed to allow access to 50 percent of the upper wall and ceiling areas required to be surveyed as Class 2 areas.

5.4 SURVEY ACTIVITIES

The survey consisted of alpha scanning of Class 1 and 2 SUs. The required surveys were performed with scan coverage ranging from 100 percent for Class 1 to 50 percent for Class 2.

Direct measurements at predetermined locations were made for:

- Alpha and gamma radiations (Class 1 and 2)
- Removable alpha or beta radioactivity (Class 1 and 2)
- Swipe surveys for H-3 in the former X-ray room

In addition, biased surveys were performed at 21 sinks and floor drains throughout the first and second floor and in the Class 1 and 2 areas. These surveys consisted of smears for removable contamination. Only one building drain contained sediment. Sediment was sampled from the drain in SU 28 on the first floor and sent to a laboratory for analysis and is further discussed in [Section 8.4](#). Ventilation systems on the second floor, throughout the Class 1 areas, were surveyed at accessible locations for removable contamination and direct measurements for alpha activity. Direct alpha measurements were performed on external roof areas in the vicinity of ventilation exhaust ducts.

Surveys were conducted and documented in accordance with the TSP with the exception of documentation in two areas. First, SU 31, a Class 1 area, contains a small wall area in the south end of the west side of the survey unit. Surveys of the lower and upper walls were performed as required by the TSP, however, the SCM surveys of the walls were included as a continuation of the wall surveys of SU 39. Documentation of those surveys is included in the SU 39 results. SU 39 abuts SU 31. Second, SU 38 is the floor area adjacent to the elevator on the first floor of Building 5. The survey unit includes a Class 1 survey on the lower wall, up to 6 feet, and a Class 2 survey on the upper wall, from 6 to 12 feet. SCM surveys of the lower and upper wall of SU 38 were completed as required, however, they were documented as part of SU 40, the area surrounding SU 38. In both cases, SU 31 and SU 38, no activity distinguishable from background was identified.

Several SU predetermined sample locations contain minor administrative issues that are addressed on the data reports in [Appendix E](#) or [Appendix H](#). As an example, the floor survey of SU 21 contains locations 1 through 17. The overhead survey of that survey unit contains locations 19 through 35. The area maps were created separately, and the start number for the overhead survey was misidentified as 19 rather than 18. The fact that location 18 is not used is documented on the appropriate page of [Appendix E](#). Additionally, the TSP locations in one survey unit, SU 60, have been redefined following confirmation of SU dimensions. An error in the original SU dimension maps was discovered during fieldwork activities. During the creation of the new maps to the precise dimensions, the sequence of locations on floors and walls was reversed. The original maps started the location sequence at 1 on the floor of SU 60. The revised map starts the sequence on the lower walls. In the cases described, all survey units received the minimum 17 measurements at locations created by Visual Sample Plan ([Gilbert 2001](#)) with random start locations marked in the field.

6.0 SURVEY INSTRUMENTATION

Instruments selected for this survey were appropriate for the physical and environmental site conditions as described in the TSP. The instruments and selected measurement methods used were able to detect the stated ROC or radiation type of interest and were, in relation to the survey or analytical technique, capable of measuring levels equal to or less than the release criteria.

6.1 INSTRUMENT CALIBRATION

Initial calibrations of hand-held survey instruments to National Institute of Standards and Technology (NIST)-traceable sources were performed by the instrument vendor. Ludlum instruments were calibrated by Ludlum within a year prior to this survey. After they had been calibrated by Ludlum, these instruments underwent an efficiency determination by MSI personnel on site, specific to the ROC. The SCMs were also calibrated to NIST-traceable sources on site. The SCMs were calibrated at the start of the project using MSI's approved calibration procedures. Instrument calibration and efficiency documents are provided in [Appendix C](#).

6.2 INSTRUMENT OPERATIONAL CHECKS AND QUALITY ASSURANCE PROCEDURES

Radiation detection instruments used in the survey were maintained and calibrated to operate within manufacturer specifications so that the required sensitivity and precision were maintained. Survey instruments were source-checked twice daily, both before and after each day's survey. Procedures were followed for all field instrumentation to verify that the instruments were operating properly and that the data were valid with instrument calibrations that were NIST-traceable. These procedures included functional operational checks, routine maintenance, calibration procedures, and operational instructions.

The operational checks ensured that the instruments were within the ± 20 percent acceptance criteria established when their baseline information was set up. When the instruments did not meet the criteria, they were removed from service, tested, repaired or replaced, and recalibrated. Only data obtained with instrumentation that has successful operational checks were used.

6.3 INSTRUMENTS FOR THE MEASUREMENT OF ALPHA AND SURFACE ACTIVITY

Various gas-filled detectors were used to measure alpha surface activities. Details are provided in the following sub-sections.

6.3.1 Instruments for the Static Measurement of Alpha Surface Activity

SU fixed-point locations were measured with the Ludlum 43-68 gas flow proportional detectors coupled to a Ludlum 2221 ratemeter. The counting gas used was P-10.

6.3.2 Instruments for the Scan Measurement of Alpha Surface Activity

SUs were scanned with the SCM or the Ludlum 43-68 gas flow proportional detectors coupled to a Ludlum 2221 ratemeter. The SCM uses a gas flow position sensitive proportional counter (PSPC). The PSPC functions using P-10 as the counting gas. As in any proportional counter, voltage plateaus are established for the detection of alpha or alpha-plus-beta particles. High voltage appropriate for the type of particles to be detected is applied to the single anode wire that runs the length of the detector. The SCM computer compares the pulse heights of pulses sensed at each end of the anode wire and establishes the location on the anode wire where the nuclear particle was sensed. Although the available resolution is greater than 2,000 locations on the anode wire, the SCM computer will “bin” the data in 5-centimeter (cm)-wide increments along the length of the wire.

The SCM was operated in both a dynamic or “rolling” mode or a static or “corner” mode. In the dynamic mode, the system uses a direct current-powered drive motor affixed to a cart that contains all electronics and computer hardware, and the detector assembly is mounted to the front of the cart. The SCM’s design focuses on eliminating human performance issues associated with surveys of large areas. The system is designed such that surveys are performed at constant speed, the detector is held at a set distance from the surface being surveyed, and survey data are recorded automatically. In the dynamic mode, a precision wheel encoder is mounted to the cart axle to measure the distance traveled by the cart. The encoder can measure to less than a tenth of a centimeter and is used to trigger the computer to capture data for every 5 cm of travel of the SCM cart. The result is count data (counts) for every 5 cm “bin” for every 5 cm of travel, or a matrix of 25 cm² “pixels” of data. In the static mode, a preset time is applied to collection of data from a stationary detector. Data are binned in a manner similar to the dynamic mode.

Data are transferred from the SCM to a processing station that contains the Survey Information Management Systems (SIMS) software via removable media. SIMS software is used to “stitch” the individual blocks of data together to create a single survey of the entire area. The data collected in 25 cm² pixels is summed with adjacent pixels in a manner that will result in the evaluation of every possible 100 cm² area. In measuring activity, each 25 cm² pixel is 25 percent of four overlapping 100 cm² areas. This process ensures that small areas of activity above limits are not missed through grid registration errors.

The SCM in the dynamic mode is operated with a recount detector for alpha surveys with low release criteria. A second detector is hard mounted behind the first at a constant distance. Both detectors perform complete surveys as discussed above. SIMS will generate a survey for each detector. The individual detector surveys will display activity from a source if present, but also counts that result from background activity. SIMS applies “coincidence logic” to the two surveys to avoid false positives caused by background radioactivity. The recount detector survey is superimposed on the primary detector survey. Each 100 cm² area is evaluated against a threshold number of counts. If both detectors are above the threshold value, the results are averaged, and the activity is evaluated against the release criteria. If either the primary or

recount detector is below the threshold, the counts are considered to be from background, and a null value is incorporated in the coincidence logic report.

A second count is obtained at each static measurement location in the static mode. The second count is considered the recount survey. The SIMS coincidence logic described above is applied to evaluate whether activity is present or if the observed counts are background. The coincidence logic applied within the SIMS software is described in Appendix J of MARSSIM (NRC 2000) and is designed to reduce the large number of false positives typically obtained when the release criterion is low, as in alpha surveys.

6.3.3 Determination of Instrument Efficiency for Alpha Surface Activity Measurements

Instrument efficiency (ϵ_i) is defined as the ratio between the net count rate (in counts per minute [cpm]) of the instrument and the surface emission rate of the calibration source for a specified geometry. Instrument efficiency was calculated by obtaining static counts from a detector positioned over a calibration source that features a NIST-traceable surface emission rate.

Additional considerations that control overall instrument efficiencies include the following:

- **Calibration Sources:** Selected calibration sources feature alpha and beta emitter energies similar to those expected from contaminants in the field (the same or similar to ROCs). An adjustment for radiations per disintegration may be applied.
- **Source Geometry Factors:** Geometry factors may be applied based on a calibration source area greater than the area of the probe.
- **Source-to-Detector Distances:** Calibration is performed at a “source-to-detector” distance consistent with the “detector-to-surface” distance used in the field.
- **Window Density Thickness:** Calibration is performed using a detector window density thickness identical to that used in the field.
- **Detector-Related Factors:** The SCM is able to increase efficiency by using a 10-cm-deep detector to survey a 5-cm bin (see [Section 6.3.2](#) above). This detector geometry allows the 5-cm section to be passed over twice and increases the instrument efficiency by a factor of two.

6.4 INSTRUMENT FOR THE MEASUREMENT OF EXPOSURE RATES

The Ludlum Model 19 instrument, which contains an NaI detector, was used to measure ambient gamma exposure rates. NaI scintillation detectors are sensitive to photon gamma radiation and are ideal for locating radiation levels above background when gamma scans and static measurements are collected.

6.5 INSTRUMENT FOR MEASURING SWIPE SAMPLES

Swipe samples were collected for analysis of removable contaminants. Swipe samples, also referred to as smear samples, were obtained at the discrete surveillance points in the SUs. All samples were processed using a Ludlum Model 2929 low-background, alpha/beta counter. This counter uses a dual-phosphor scintillation detector.

6.6 DETECTION SENSITIVITIES

The TSP ([Appendix A](#)) presents a detailed discussion on detection sensitivities of the detectors. [Table 2](#) summarizes the results of sensitivity calculations. Some have been recalculated where actual field parameters differ from the TSP assumptions. These recalculated values are noted in [Table 2](#). Resulting instrument sensitivities for the Building 5 survey are more than sufficient to detect the applicable release criteria.

7.0 SURVEY PROCEDURES

This section provides a review of the survey procedure and how the procedure met project data quality objectives (DQO). This section includes site-specific discussions of techniques for scanning, direct radiation, and removable contamination surveys of Building 5. [Appendix D](#) presents the general procedure for scanning surveys within the scope of the Alameda Point Basewide Radiological Survey program is described in *Alameda Point Radiation Survey Methods: Surface Contamination Monitor (SCM) Surveys Supported by Hand-held Instrumentation* ([MSI 2012b](#)).

7.1 REVIEW OF DATA QUALITY OBJECTIVES

DQOs are qualitative and quantitative statements developed to define the purpose of the data collection effort, clarify what the data should represent to satisfy this purpose, and specify the performance requirements for the quality of information to be obtained from the data. These outputs are used to develop a data collection design that meets all performance criteria and other design requirements and constraints. The U.S. Environmental Protection Agency (EPA) has developed a seven-step process to develop DQOs.

Step One – State the Problem

The problem can be stated as, “Can areas associated with historical radium dial instrument maintenance within Building 5 and the storage of H-3-filled exit signs be released from radiological controls or is remedial action required?”

Step Two – Identify the Goal of the Study

The primary use of the data from this survey is to support a characterization survey of Building 5. Therefore, the decision to be made can be stated as, “Do the results of the survey meet the release criteria for the site-specific radiological nuclides of concern?”

Step Three – Inputs to the Decisions

Radiological surveys designed to support the characterization survey of Building 5 included:

- 100 percent scan surveys of Class 1 areas
- 50 percent scan surveys of Class 2 areas
- A minimum of 17 systematic, static measurements in each Class 1 and Class 2 SU.
- A minimum of 17 systematic swipe samples analyzed for H-3 in the Class 1 and Class 2 areas within the former X-ray room

Step Four – Identify the Boundaries of the Study

The lateral and vertical spatial boundaries for this survey effort are confined to affected areas within the interior of the first and second floors of Building 5.

Step Five – Identify the Decision Rules

If the presence of the site-specific ROC on building surfaces is less than the release criteria, then no further measurements are required. If the results of the survey exceed the release criteria, then the data will be used to characterize the site-specific ROC with the intent to design and implement remediation in the future.

Step Six – Set Limits on Decision Errors

Limits on decision errors are set at 5 percent, as specified in the work plan ([ChaduxTt 2010](#)).

Step Seven – Optimize the Study Design

Operational details for the radiological survey process have been developed. The theoretical assumptions meet or exceed guidelines in MARSSIM ([NRC 2000](#)). Specific assumptions regarding types of radiation measurements, instrument detection capabilities, quantities and locations of data to be collected, and investigation levels are contained in the TSP and the work plan ([ChaduxTt 2010](#)). The TSP was reviewed and approved by the Navy, both Base Realignment and Closure (BRAC) and Radiological Affairs Support Office (RASO) staff.

7.2 SCAN MEASUREMENT TECHNIQUE

Scanning assessments were conducted using the SCM in conjunction with an automated information management system ([MSI 2012b](#)). This arrangement allowed computer analysis of large volumes of survey measurements acquired in relatively short periods, resulting in easily interpretable graphical displays of survey results. The survey technology was employed for both scanning and static measurements. The scanning mode is used to survey open areas and the static mode was used to monitor restricted access spots such as floor-to-wall or wall-to-wall corners. Static measurements were also used for measurements on overhead areas, such as upper walls or ceilings. The SCM is shown in operation in [Figure 6](#).

The SCM system uses a patented PSPC that is capable of establishing where along the detector a decay event occurs. This capability allows a long detector to be divided electronically into a continuous array of small, virtual detectors that are similar in efficiency to other counters, but that have backgrounds associated with small area detectors. This division results in improved sensitivity because of the low background and specific identification of the location of the radioactivity. In scanning mode, the SCM logged information in 25 cm² bins by logging data for each 5-cm width of the PSPC and for every 5 cm of forward travel. Scan speed is motor-controlled, and the distance the SCM travels is measured by a precision wheel encoder. Data were recorded in 25 cm² pixels over the entire surface surveyed; thus, the SCM records 400 measurements for every square meter it traverses. Controlling the survey speed and automatically logging the location of the data obtained using a wheel encoder eliminate typical errors and uncertainties associated with hand-held detectors.

Areas that are not accessible to the large SCM probes are marked as not surveyed (N/S) in the field. Hand-held surveys with the Ludlum 43-68 detector and 2221 ratemeter are performed in those areas in accordance with the TSP. Hand-held instrument surveys were limited to small areas, limiting the potential for errors caused by difficulties in controlling survey speed, source-to-detector distance, and detection of small increases in count rate. As areas marked N/S are surveyed with hand-held instruments, the technician initialed the area with an indelible marker.

7.3 DIRECT MEASUREMENT TECHNIQUE

Direct measurement locations were first selected using VSP software. Locations generated by VSP are presented in [Appendix A](#). After these locations had been found and marked, the following measurements were performed:

- 1-minute alpha count with the Model 43-68 detector (Class 1 and 2 areas)
- Gamma exposure rate measurement with the Model 19 detector
- Swipe measurement for removable contamination, analyzed with the Model 2929 counter (alpha and beta)
- Swipe measurement for removable H-3 analyzed by off-site laboratory (former X-ray room only)

8.0 RESULTS AND ANALYSIS

This section presents the results of the direct measurements at pre-determined locations, the scanning measurements on floors and walls, and the biased measurements at building drains.

8.1 DIRECT MEASUREMENTS

Direct measurement results taken at pre-determined, random locations are summarized in [Table 3](#). Individual SU data, including all 17 or more direct measurements, are provided in [Appendix E](#).

8.1.1 Alpha Direct Measurements

Nineteen direct alpha measurement exceeded the release criterion with the maximum value of 572 dpm/100 cm² in SU 48. All direct measurements that exceed the release criterion are in Class 1 areas. Those survey units exceeding the release criterion are highlighted in bold print in [Table 3](#). All other direct readings obtained at systematic measurement locations in Class 1 and Class 2 areas were below the 100 dpm/100 cm² release criterion. Five of the locations recorded measurements 1 to 2 cpm above the limit and should be investigated further with longer count times, and possible background interference from radon daughter products should be considered. These direct measurement locations are:

- SU 2 floors, location 19
- SU 13 floors/walls, location 17
- SU 14 floors/walls, locations 15 and 17
- SU 26 floors, location 31
- SU 56 floors/walls, location 18

Sixty direct measurements were obtained on and in ventilation ducts within the second-floor instrument shops. The direct measurement locations coincide with the locations of the removable contamination surveys. Ventilation ducts run west to east through the large shop areas and north to south from the original paint shop areas along the west end of the affected area. All direct measurements were below the release criteria, with the maximum value of 43.5 dpm/100 cm² measured on top of the duct in the overhead of SU 21.

Thirteen direct measurements were obtained on the roof in the vicinity of the exhaust duct above SU 50. All readings on the roof surface were elevated, with all but two showing values above 100 dpm/100 cm². The measurements were obtained both at the exhaust point and up to 20 feet away. The maximum value recorded was 485 dpm/100 cm².

In addition to the defined locations in each survey unit, direct readings were obtained during investigations of areas that exhibited high readings from the SCM surveys, hand-held instrument surveys in areas inaccessible to the SCM, or other unusual situations. The following describes other direct readings obtained through those investigations.

- A direct reading was obtained on paint that was affixed to a piece of masking tape that had been used to tape a rope to the west wall of SU 9. Wall paint adhered to the tape as

the tape was removed. The underside of the paint was measured to be 933 dpm. The surface area of the paint was less than 100 cm².

- Surveys in SU 16 in the area where a drain pipe had been removed and was known to have high alpha and beta readings. Direct surveys confirmed those readings. During surveys of the immediate area, a spot of greater than 3,000 dpm was identified on the window support closest to the northeast corner of the room.
- Window sill surveys in SU 20, SU 41 and SU 57 identified numerous locations in excess of the release criterion, with a maximum direct measurement value of 1,300 dpm/100 cm².
- Surveys within an electrical box on a column within SU 22 identified a spot measurement of 422 dpm/100 cm².
- Surveys of a protective handrail and back wall around fire control system components in SU 33 identified numerous areas greater than the release criterion. The maximum direct measurement on the handrail was 3,311 dpm/100 cm². Contaminated areas on the floor in the vicinity of the handrail were identified by the SCM, with a maximum activity of 1,424 dpm/100 cm².
- Insulation on a circular ventilation duct overhead of SU 41 yielded a direct measurement of 333 dpm/100 cm².
- Beam support structures below the penetration in the northeast corner of the overhead, SU 62, are above SU 30 on the first floor, but were surveyed as part of the ceiling survey SU 62. Several spots were identified with a maximum direct measurement of 1,166 dpm/100 cm².

8.1.2 Analysis of Alpha Direct Measurements

Nineteen survey unit areas had direct measurements from the pre-determined measurement locations with identified activity above the release criteria for Ra-226. The maximum measured activity is 572 dpm/100 cm² located in SU 48. All measurements above the criteria are in Class 1 areas and require remediation and re-survey. Results are summarized in [Table 3](#) with those areas exceeding the release criterion in bold. Several survey unit areas have multiple direct measurement locations that exceed the release criteria. The specific measurement number can be identified on the detailed direct measurement summaries in [Appendix E](#). The location within the survey units of each numbered location in each survey unit can be identified in the survey unit drawings in the TSP, [Appendix A](#). Indelible markers were used to mark the field location of each direct measurement during the measurement process to facilitate locating areas of elevated activity.

In addition to the 19 direct measurements identifying areas greater than the release criterion, direct measurements in areas inaccessible to the SCM identified elevated readings in SU 57 and SU 62, at the location on the first floor, northeast corner ceiling. The elevated activity was found at the location of the penetration that previously housed a drain line from the radium dial

painting room, SU 16, and on adjacent I-beams. The fixed contamination exceeded 1,000 dpm/100 cm² on the ceiling below the floor penetration of SU 16.

The contamination found on paint adhering to a piece of masking tape removed from the west wall of SU 9 indicates that paint was used to fix the contamination during paint operations. The paint is adequate to shield the alpha radiation emitted from Ra-226. The extent of the contamination under the paint in SU 9 is unknown.

Contamination was found on the handrails and floor in SU 33. Pipe runs directly above the area prohibited access to the upper wall and ceiling to identify the cause or extent of the contamination. The area is directly below SU 57. Further investigation and surveys of the upper walls and ceiling, as well as the piping, are warranted.

8.2 SCANNING MEASUREMENTS

Scanning measurement results are summarized in [Table 3](#) and presented in detail in [Appendix F](#). More than 3.5 million alpha measurements were made with each detector of the SCM. Areas inaccessible to the SCM were surveyed with the hand-held Ludlum 43-68 detector and 2221 ratemeter.

8.2.1 Alpha Scans

The SCM was configured in the recount mode for alpha scans using two detectors. The primary and recount detectors collect data independently in this mode. Since the detectors are in a rigid mount, the offset between the detectors is constant. Processing software then superimposes the recount detector data over the primary. The processor then applies a “coincidence” logic to detect very low levels of radionuclides. This logic accepts events only where both detectors register a threshold number of counts exceeded in the same 100 cm² area; in this case three counts or greater. This re-count approach allows for detection of low-level alpha contamination while suppressing false positives caused by background. Background activity will rarely register counts above the threshold in both detectors (less than 1×10^{-4} probability).

The maximum alpha activities detected in each SU are presented in [Table 3](#). Alpha scan survey reports are provided [Appendix F](#). The three color-coded maps in [Appendix F](#) show results from the primary detector, the recount detector, and points where the “coincidence” threshold is met. The activity shown on the third map is the average reading from the two detectors. Of the 65 survey units surveyed for alpha activity, 29 SUs contained areas above the release criterion of 100 dpm/100 cm². The maximum values for each of the SUs exceeding the release criterion are provided in [Table 3](#). In all cases where the elevated readings were found during scans with the SCM, verification surveys were performed with a direct measurement using a Ludlum 43-68 detector with a Ludlum 2221 ratemeter. The location of each of the contaminated areas was marked in the field for future remediation efforts. A summary of the contaminated areas in Building 5 with photographs of each area is provided in [Appendix G](#).

The 65 survey units are subdivided into floor, lower wall, upper wall, and ceiling surfaces. Floors and lower walls are combined in many survey units provided the total surface area does not exceed 100 m². If combining floors and lower walls results in the survey area exceeding 100 m², the surfaces are surveyed as separate survey areas. SCM surveys are limited to the individual surfaces, regardless of whether they are combined in a single survey area. In many cases, SCM surveys identified activity greater than the release criterion on both the floor and lower wall surfaces of a single survey area. Table 3 provides a complete summary of all surfaces that contain activity greater than 100 dpm/100 cm².

Of the 43 scan survey areas identified in Table 3 that contain activity greater than the release criterion scan, 27 areas are Class 1 survey areas. The remaining 16 survey areas with activity greater than the release criteria are Class 2 survey areas. A 50 percent surface area survey was performed in Class 2 survey areas. Of the Class 2 surveys with elevated activity measurements, all were in overhead, with the exception of SU 57, which is a buffer area at the east end of the second-floor area, where elevated activity was found on the floor of the survey area. Class 2 overhead areas consisted of upper walls (greater than 6 feet) and ceilings. The Class 2 areas with elevated activity are SU 8, SU 9, SU 10, SU 17, SU 20, SU 21, SU 22, SU 41, SU 44, SU 45, SU 46, SU 47, SU 48, SU 49, SU 57, and SU 58. Reclassification and remediation are required in all Class 2 areas.

Standard practice for elevated areas identified with the SCM is to perform an investigation with a hand-held detector and ratemeter to verify or refute the elevated measurement. Investigation surveys were conducted by technicians using the same survey instrumentation and survey protocols used during the rest of the survey. The SCM scan survey reports identify the specific survey strips to be investigated. If hand-held instrumentation surveys identified that there were no areas above the release criteria, the surveys were documented, signed by the technician and reviewed and approved by the Radiological Engineer and the Project Manager. The SCM surveys included several with an elevated reading along the entire detector with either the primary or recount detector, with no indications of elevated response on the other. This response is typically a result of the detector coming in contact with a piece of metal that is not grounded to the electrical ground through the SCM to the building electrical ground. The SCM uses charge-sensitive pre-amplifiers. Metal items that are not grounded to the building ground, as is the SCM through the alternating current power cord, can cause electronic noise in the detector. The hand-held instrument survey confirmed no activity in the single strip. Grounding was identified as the cause of SCM response in the following areas:

- SU 4, lower walls, SCM survey # FA0411A
- SU 4, ceiling, SCM survey #FA0431A
- SU 5, lower walls, SCM survey # FA0511A
- SU 5, ceiling, SCM survey # FA0531A
- SU 6, ceiling, SCM survey #FA0631A
- SU 12, upper walls, SCM survey # FA1221A

- SU 19, Floors, SCM survey #FA1901A
- SU 22, upper walls, SCM survey # FA2221A
- SU 24, lower walls, SCM survey # FA2411A
- SU 47, floor, SCM survey # FA4701A
- SU 47, upper walls, SCM survey # FA4721A and FA4721B
- SU 56, upper walls, SCM survey #FA5621A
- SU 57, lower walls, SCM survey #FA5711A
- SU 57, upper walls, SCM survey # FA5721A

In several cases, investigation with a Ludlum 43-68 detector and a Ludlum 2221 ratemeter did not identify any elevated activity. However, a piece of exposed metal at the location, in some cases doorframes or exposed anchor bolts, most likely caused grounding of the SCM detector, resulting in the apparent elevated reading. In many cases, the grounding impacted one of the two detectors, however the second detector output did not contain any areas greater than the threshold value, hence no activity above the threshold was identified in the coincidence report. In those cases, the second detector serves as the investigation survey. Hand-held instrument survey documentation that identified no areas greater than the release criteria is provided in [Appendix K](#). For one survey, SU 56 Overheads (FA5721A), the grounding impacted both the primary and the recount, with both detectors appearing to be responding to a grounding effect. However, the investigation survey documentation cannot be located and the affected survey strips must be re-investigated.

The color-coded maps in [Appendix F](#) are not true maps of the areas. Data from multiple SCM surveys were inserted in the figure at approximate locations. However, hot spots or other points of interest can be re-located by searching the raw data files and locating the individual SCM measurement. Those measurements were coded and the codes were marked on the floors and walls where they were collected.

8.2.2 Analysis of Scan Measurements

Scan measurement results were compared with release criteria. Forty-three of the survey areas surveyed for alpha activity exceeded the release criterion for Ra-226 and require remediation and re-survey. Sixteen of the SUs include areas previously classified as Class 2 areas. The source of contamination in the Class 2 areas must be investigated to delineate the extent of area reclassification. Remediation and re-survey are required in areas found to contain radioactivity in excess of the release criterion for Ra-226, 100 dpm/100 cm². SCM surveys that include areas in excess of the release criterion have been verified with hand-held detectors (Ludlum 43-68) and ratemeters (Ludlum 2221). Areas that are inaccessible to the SCM have been surveyed with the hand-held instruments. Direct measurements are performed in areas that indicate readings above background and are discussed in [Section 8.1.1](#).

8.3 REMOVABLE CONTAMINATION

Removable contamination surveys were performed in accordance with the TSP and the requirements of standard operating procedure (SOP)-006, Radiation and Contamination Surveys. Areas of 100 cm² were swiped and the location and swipe number recorded. Swipes were counted using a Ludlum Model 2929 instrument, which uses a dual phosphor detector, in accordance with RP-OP-017, Operation of the Ludlum Model 2929 Dual Scalar. A daily background and source check was performed on the instrument when in use. A 20-minute background check was performed to ensure that contamination from swipes had not entered the chamber. NIST-traceable planchet sources were used to assess the efficiency of the Ludlum Model 2929. The system efficiency was 41 percent for alpha activity and 32 percent for beta activity. Minimum detectable activity (MDA) was calculated daily using Equation 7-10 of the work plan (ChaduxTt 2010). The MDA values for the Ludlum Model 2929 ranged from 9 to 12 dpm for alpha activity and from 78 to 84 dpm for beta activity.

The requirement to obtain smear surveys include at systematic monitoring locations as described in Section 4.5 and Section 5.2 and as follow up to LAWs performed prior to initiating surveys in an area as described in Section 5.2. Two thousand three hundred and sixty nine smears were collected at systematic monitoring locations in 65 SUs not including SU 61 former X-ray room where H-3 smears were analyzed off site. No removable contamination above the release criteria was identified in any systematic monitoring location. Appendix H presents the smear data. The systematic monitoring location maxima are less than the release criteria for removable contamination. The removable contamination release criterion for building surfaces (floors and walls) is 20 alpha dpm/100 cm² for Ra-226. There are no ROCs that are beta-emitting radionuclides on the second floor or on the survey units of the first floor shown in Figure 3.

Based on indication of contamination on LAWs, removable contamination was detected with smear surveys in areas of the overheads of several SUs. Standard practice involved use of LAWs of areas before the surveys were performed. The LAWs identified removable activity in the overheads, primarily on steel beams, in SU 9, SU 20, SU 21, and SU 58. Removable contamination was also identified within a wall panel in SU 10, within an electrical box in SU 22, and on the ceiling in the area of a previous drain line penetration in SU 62. LAWs were supported by 100 cm² area smears to support the findings. Field survey reports showing the locations of the contamination can be found in Appendix H, or supported by photographs found in Appendix G. Table 3 presents a listing of removable contamination above the release criteria.

SU 61 former X-ray room, which contained H-3 exit signs, was surveyed for H-3 using wet smears in accordance with SOP-006, Radiation and Contamination Surveys. A total of 52 smears were collected at intervals identified by the computer program Visual Sample Plan, as discussed in the TSP, Appendix A. Eighteen smears were taken on the floor, 17 smears were taken on the lower walls up to 6 feet, and 17 were collected on the upper walls and ceilings. The smears were processed at an off-site laboratory, Test America Inc., using preparation by distillation and counting with a liquid scintillation counter. Results of the H-3 smear analysis are reported in Appendix I. All smears were reported below the release criterion for H-3. The

maximum reported concentration is 25 dpm/100 cm². The release criterion for removable activity for H-3 is 1,000 dpm/100 cm².

Various sinks and drains were surveyed using smears in accordance with SOP-006. The first-floor SUs contained one sink (SU 34) and four floor drains (SU 29, SU 35, SU 36, and SU 37). One additional floor drain immediately outside SU 35 was also surveyed. Second-floor smear surveys included single sinks in SU 20 and SU 50, two sinks and a common drain in the women's rest room (SU 51), and six sinks in the men's rest room (SU 53). A floor drain in SU 51 and floor plug penetrations in SU 25 and SU 57 were surveyed. All removable contamination results were less than MDAs: 13 dpm/100cm² alpha and 80 dpm/100cm² beta.

Smear surveys were performed in areas identified through LAWs at suspect areas or in other areas where removable contamination could exist. The LAW survey of the upper beams against the north wall of SU 9 indicated loose contamination. Subsequently, 32 smears were obtained from the beams. Ten of the beams had activity above the release criterion for Ra-226, with a maximum activity of 180 dpm/100 cm². Smears of the ventilation exhaust fans in SU 9 and SU 20 showed no removable contamination above the MDC of the counting instrument. Exhaust ventilation ducts run in the overheads from SU 9, SU 10, SU 11, and SU 19 through the former instrument shop, SU 20, SU 21, SU 22, SU 23, and SU 24. Covers installed at the inlet to the ducts were removed as were the inlet registers through the instrument shop. Of the four ducts, five available registers in the two northernmost ducts that begin in SU 9 and SU 10 in the instrument shop allow access to the internals of the ducts. The remaining two ducts have four access registers. Points of access to all ducts were surveyed with LAWs and smears for removable contamination. Smears were also obtained on the upper surface of each duct at locations between access points. All smears from the internals of the ventilation exhaust ducts were determined to be less than MDA. Of the smears taken on top of the ductwork, one smear taken between the fourth and fifth access points (looking west to east) showed contamination at 24 dpm/100 cm². Two other smears showed detectable levels of removable contamination of 12 and 14 dpm/100 cm². All other smears from the top of the ductwork were determined to be less than the MDA. The MDA for smears taken on and within these ventilation ducts for alpha activity was 11 dpm/100 cm². Field survey reports showing the locations of the contamination can be found in [Appendix H](#), or supported by photographs found in [Appendix G](#).

Smear surveys for removable contamination were also performed within accessible locations of ductwork running north to south from SU 11 through SU 19 and SU 60 to an exhaust plenum in the overhead of SU 26. Since the exhaust duct ran above the existing ceiling, smears were limited to the exhaust registers in SU 11, SU 19, and SU 60 and the accessible portion of the exhaust plenum upstream of the prefilters. Seven smears were collected, and all smears were less than the MDA when counted on the dual-phosphor Ludlum 2929. The MDA for smears obtained in this exhaust ventilation duct was 12.5 dpm/100 cm².

Smear surveys for removable contamination were also performed on the roof above the second floor area at the point of the ventilation exhaust duct. A single duct several feet across in a candy cane shape to exhaust air downward is on the roof approximately above SU 50. Thirteen smears were collected on the roof in the vicinity of the exhaust air and within the duct at the exhaust

point. All smears were counted on the dual-phosphor Ludlum 2929 and determined to be less than the MDA: 12 dpm/100 cm².

8.4 MEDIA SAMPLING

A single drain in Building 5 contained an adequate amount of sediment for sampling. The drain is in SU 28 on the first floor. No significant sediment was found in any other drain; therefore, sediment samples were not collected. The sediment from the floor drain in SU 28 was sent for laboratory analysis for gamma-emitting radionuclides, Sr-90, Pu-239/240, and uranium-235/236. All results were less than the MDA for the analysis except for Ra-226. The Ra-226 concentration was measured to be 0.52 picocuries per gram (pCi/g), a value consistent with background soil samples and well below the release criterion of 1 pCi/g above background (ChaduxTt 2010). The laboratory analysis of sediment from the floor drain in SU 28 is presented in [Appendix J](#).

8.5 AMBIENT GAMMA DOSE RATES

Gamma dose rates varied very little in most areas of Building 5. They ranged from 4 to 12 µR/hr. Most SU have gamma dose rates in the range of 4 to 7 µR/hr, consistent with values found in reference area buildings. Higher readings were found in several of the smaller areas, such as the west stack room (SU 8) and in the tiled women's restroom (SU 51). The higher gamma dose rates were uniform and are consistent with readings typically found in small concrete rooms or rooms containing ceramic tiles. Readings from specific monitoring points are shown in [Appendix H](#) are consistent with values measured in area walkover surveys discussed in [Section 5.2](#).

9.0 CONCLUSION

The results of alpha surface radioactivity measurements collected in the 65 SUs of Building 5 associated with Ra-226 indicate that 29 SUs contain fixed surface activity above the release criterion of 100 dpm/100 cm² for Ra-226. Within those 29 SUs, activity above the release criteria was found on 43 separate surfaces. These 29 SUs require remediation and final survey or investigation to establish compliance with the release criteria. Sixteen of the 43 surfaces had Class 2 surveys therefore, less than 100% area coverage was performed due to lower potential for contamination to be present. These surfaces include upper walls ceilings and a buffer area. A determination of the cause of the contamination and a reclassification of SUs are required for these 16 areas. The specific SUs are discussed in detail in [Sections 8.1 and 8.2](#). Additionally, seven SUs were found to have removable contamination above the release criteria. The specific areas with removable contamination are discussed in [Section 8.3](#). A detailed listing of all areas with removable or fixed contamination can be found in [Table 3](#).

The former X-ray room was used to store a number of H-3 filled exit signs during the program to remove all signs containing radioactive material and replace with a non-radioactive model. The room was surveyed for H-3. No measureable H-3 was detected.

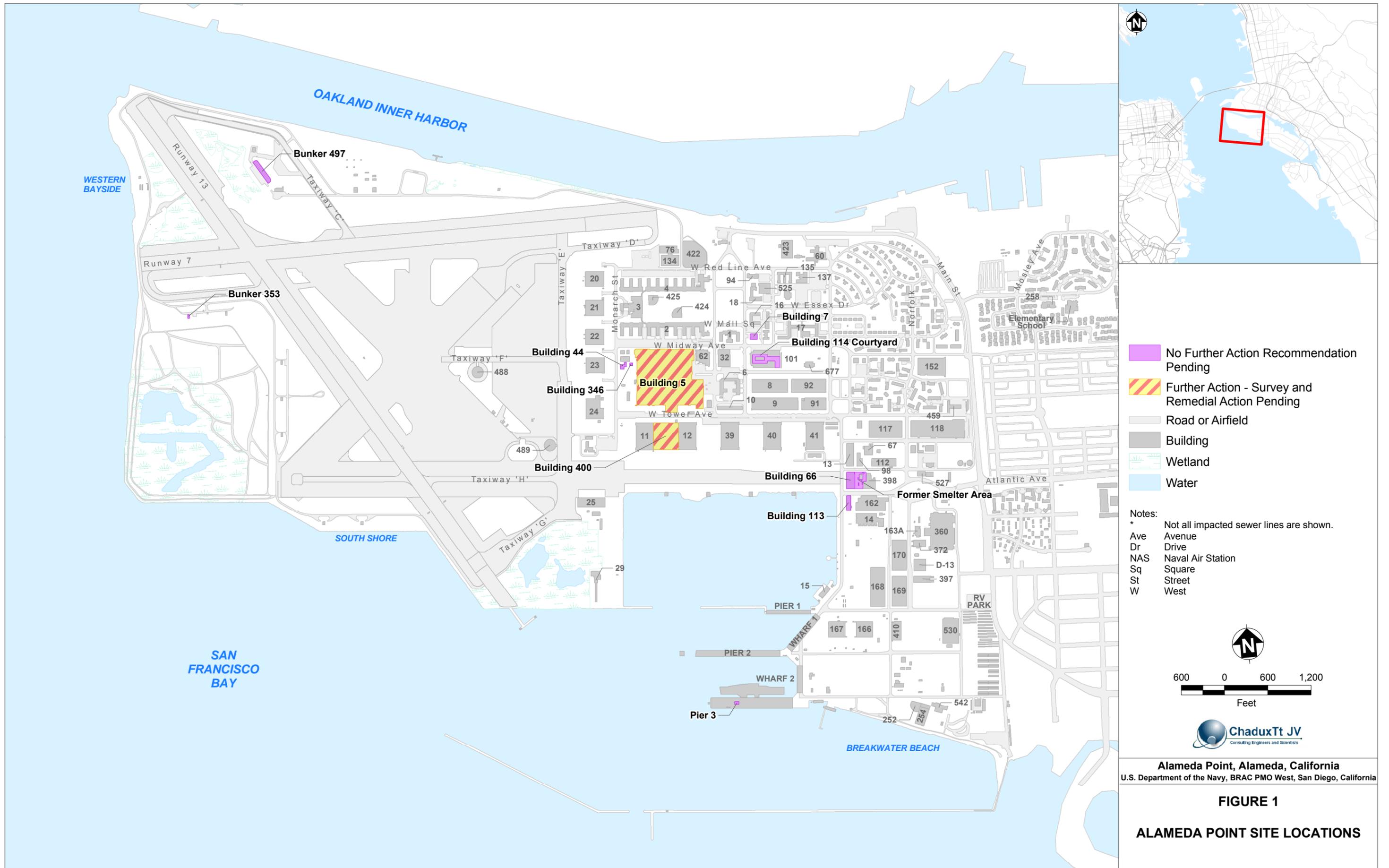
Of the remaining 36 SUs, four SUs had measurements slightly above background, but below the release criteria, and 32 SUs had only background levels of radioactivity present. The release criteria were not exceeded in any of these SUs.

Based on the results of these surveys, further characterization of these impacted areas needs to be performed.

10.0 REFERENCES

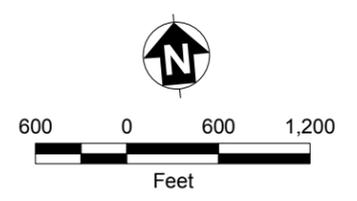
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- MSI. 2012b. *Alameda Point Radiation Survey Methods: Surface Contamination Monitor (SCM) Surveys Supported by Hand held Instrumentation*. April
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FIGURES



- No Further Action Recommendation Pending
- Further Action - Survey and Remedial Action Pending
- Road or Airfield
- Building
- Wetland
- Water

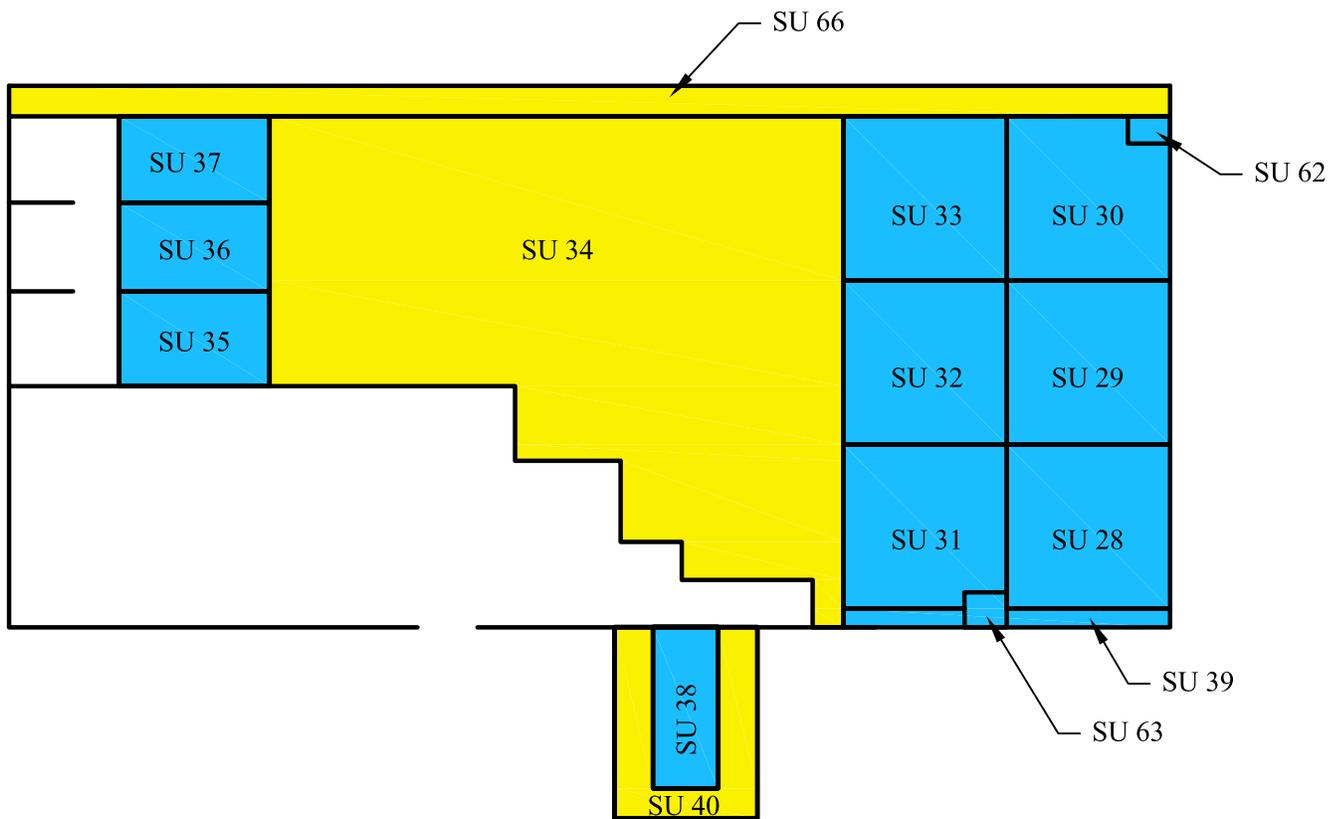
Notes:
 * Not all impacted sewer lines are shown.
 Ave Avenue
 Dr Drive
 NAS Naval Air Station
 Sq Square
 St Street
 W West



Alameda Point, Alameda, California
 U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 1
ALAMEDA POINT SITE LOCATIONS

\\emis016fp1\Cad\Navy\Alameda Point\Figure 2_Bldg 5_2nd Floor_Rev0.dwg 03/06/2012 deborah.ford DN



The Class 1 areas consist of the floor and walls below 6 feet. All Class 1 areas are sub-divided if the total area of the floor and lower walls exceeds 100 m². Upper walls and ceilings in the Class 1 areas are surveyed as Class 2 areas. All surveys are for radium 226.

- SU 62 - Ceiling and upper wall area above SU 30, location of the penetration that housed the drain line from SU 16. Class 1 area on ceiling with Class 2 buffer area around Class 1 area.
- SU 63 - Ceiling and upper wall area above SU 39, location of the penetration that housed the drain line from SU 7. Class 1 area on ceiling with Class 2 buffer area around Class 1 area.
- SU 66 - Class 2 area breezeway on first floor north of wall that runs from northeastern corner of SU 30 to northwestern corner of SU 37.

-  CLASS 3 AREA
-  CLASS 2 AREA
-  CLASS 1 AREA
- SU SURVEY UNIT

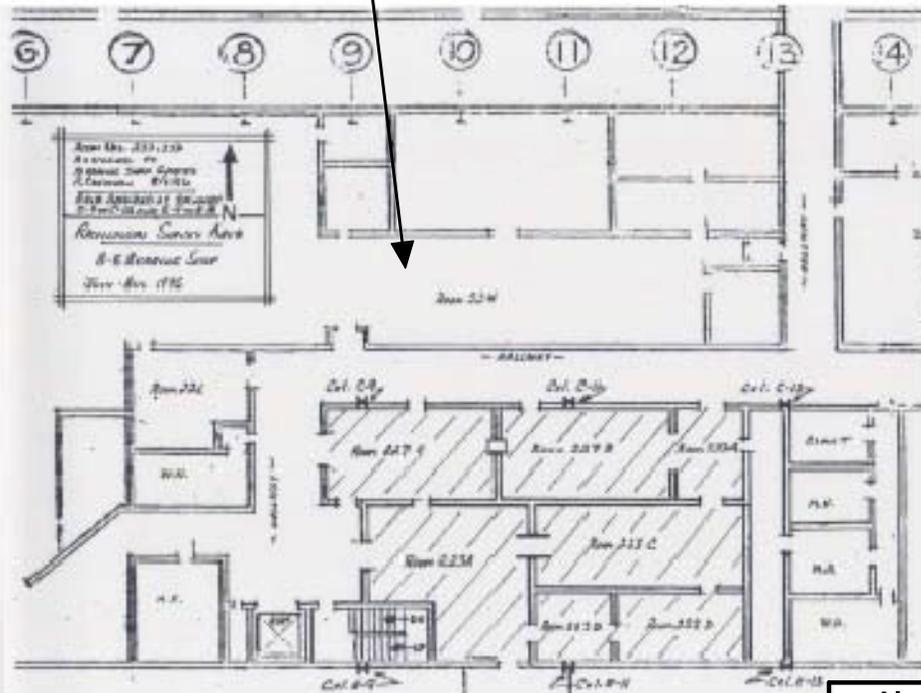
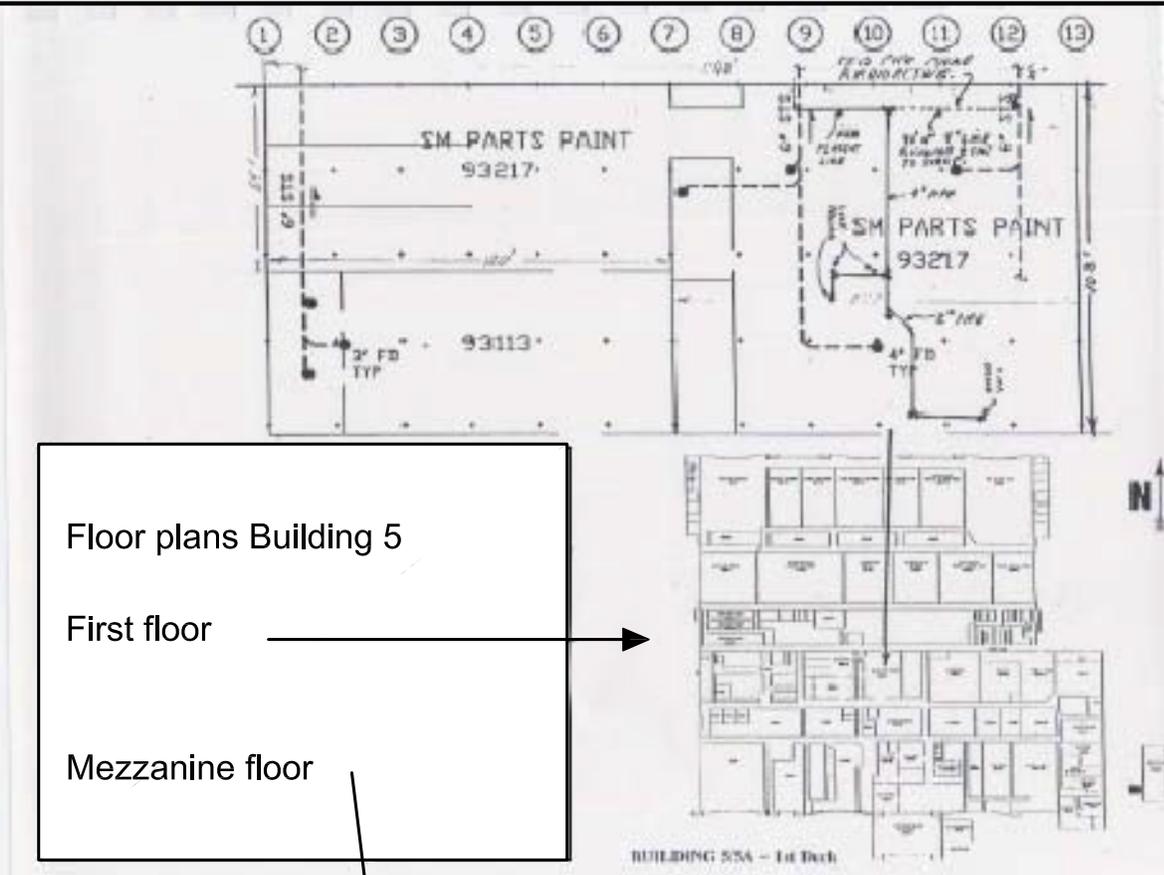


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FIGURE 3
BUILDING 5 – 1st FLOOR
CLASSIFICATION AND SURVEY UNITS

Drawing Not to Scale

Rev 1

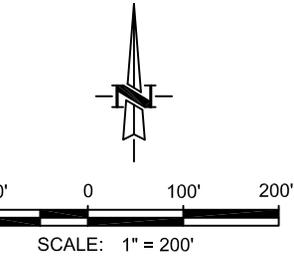
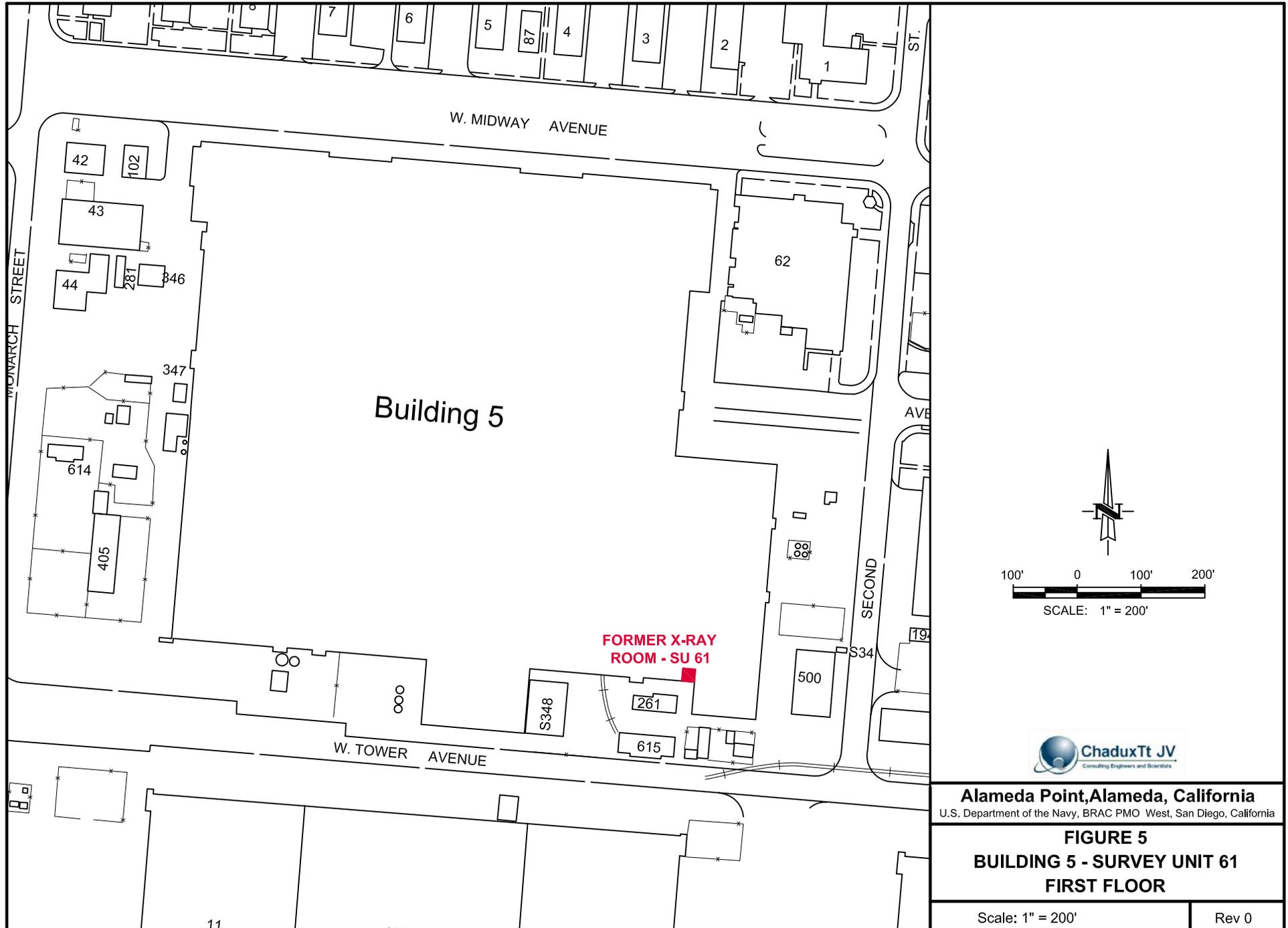


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FIGURE 4
BUILDING 5 FIRST FLOOR AND
MEZZANINE LEVEL RELATIVE LOCATION
OF THE REMOVED RADIUM PAINT SHOP
DRAIN LINES

Scale: NTS

Rev 0



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 5
BUILDING 5 - SURVEY UNIT 61
FIRST FLOOR

Scale: 1" = 200' Rev 0

Figure 6. Photographs of Surface Contamination Monitor Surveying



TABLES

TABLE 1: AREA CLASSIFICATIONS

Survey Units	Area or Rooms	Class	Area	Radionuclide of Concern
SU 1	Room 227C, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 2	Room 227B, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 3	Room 227A, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 4	Room 223A, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 5	Room 223C, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 6	Room 223B, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 7	Room 223D, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 8	West Stack Room, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 9	Room 234, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 10	Room 232C, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 11	Room 231B, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226

TABLE 1: AREA CLASSIFICATIONS (CONTINUED)

Survey Units	Area or Rooms	Class	Area	Radionuclide of Concern
SU 12	South-central room of dial painting area, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 13	Southeastern room of dial painting area, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 14	Southwestern room of painting area, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 15	Northwest corner of dial painting area, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 16	Northeast corner of dial painting area, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 17	Room 324, see Figure 2	1	Floor and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 18	Hallway, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 19	Room 231A, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 20	Northwest corner of west instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 21	Northeast corner of west instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 22	East side, middle of west instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226

TABLE 1: AREA CLASSIFICATIONS (CONTINUED)

Survey Units	Area or Rooms	Class	Area	Radionuclide of Concern
SU 23	West side, middle of west instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 24	Southern portion of west instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 25	South end of west instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 26	Hallway, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 27	West buffer area, see Figure 2	2	Floors and walls to 6 feet	Radium 226
SU 28	First floor, see Figure 3	1	Floors only	Radium 226
SU 29	First floor, see Figure 3	1	Floors only	Radium 226
SU 30	First floor, see Figure 3	1	Floors and walls to 6 feet	Radium 226
		2	Walls above 6 feet to 12 feet	Radium 226
SU 31	First floor, see Figure 3	1	Floors only	Radium 226
SU 32	First floor, see Figure 3	1	Floors only	Radium 226
SU 33	First floor, see Figure 3	1	Floors and walls to 6 feet	Radium 226
		2	Walls above 6 feet to 12 feet	Radium 226
SU 34	First floor, see Figure 3	2	Floors and walls to 6 feet	Radium 226
SU 35	First floor, see Figure 3	1	Floors and walls to 6 feet	Radium 226
		2	Walls above 6 feet to 12 feet	Radium 226

TABLE 1: AREA CLASSIFICATIONS (CONTINUED)

Survey Units	Area or Rooms	Class	Area	Radionuclide of Concern
SU 36	First floor, see Figure 3	1	Floors and walls to 6 feet	Radium 226
		2	Walls above 6 feet to 12 feet	Radium 226
SU 37	First floor, see Figure 3	1	Floors and walls to 6 feet	Radium 226
		2	Walls above 6 feet to 12 feet	Radium 226
SU 38	First floor, area outside elevator, see Figure 3	1	Floors and walls to 6 feet	Radium 226
		2	Walls above 6 feet to 12 feet	Radium 226
SU 39	First floor, see Figure 3	1	Floors and walls to 6 feet	Radium 226
		2	Walls above 6 feet to 12 feet	Radium 226
SU 40	First floor, buffer area around SU 39, see Figure 3	2	Floors and walls to 6 feet	Radium 226
SU 41	Northwest corner of east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 42	Southwest corner of east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 43	Central area in east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 44	North-central area in east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 45	South section of east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 46	Hallway, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226

TABLE 1: AREA CLASSIFICATIONS (CONTINUED)

Survey Units	Area or Rooms	Class	Area	Radionuclide of Concern
SU 47	Northeast section of east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 48	Small room in northeast section of east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 49	East section of east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 50	Room in east instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 51	Women's rest room, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 52	Hallway, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 53	Men's rest room, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 54	Hallway, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 55	Elevator, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 56	Stairway, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 57	Room 224G, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226

TABLE 1: AREA CLASSIFICATIONS (CONTINUED)

Survey Units	Area or Rooms	Class	Area	Radionuclide of Concern
SU 58	Previous computer room portion of Room 224, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 59	East buffer area and stack room, see Figure 2	2	Floors and walls to 6 feet	Radium 226
SU 60	Room in south west corner of west instrument shop, see Figure 2	1	Floors and walls to 6 feet	Radium 226
		2	Ceiling and walls above 6 feet	Radium 226
SU 61	Former X-ray room on first floor, see Figure 5	1	Floors and walls to 6 feet	Tritium
		2	Ceiling and walls above 6 feet	Tritium
SU 62	See Figure 3, ceiling in northeast corner of first floor above SU 30	1	Ceiling and walls in north east corner	Radium 226
		2	Ceiling and walls above 12 feet adjacent to Class I area	Radium 226
SU 63	See Figure 3, ceiling along south wall of first floor above SU 39	1	Ceiling and wall at the mid- point of penetration	Radium 226
		2	Ceiling and walls adjacent to Class 1 area	Radium 226
SU 64	Outside window sill along length of second floor of north wall, see Figure 2	1	Surface of window sill	Radium 226
SU 65	Wall below outside window sill, SU 64, see Figure 2	2	Length of wall below SU 64	Radium 226
SU 66	See Figure 3, breezeway on first floor along north side of area	2	Length of breezeway adjacent to SU 30, 33, 34, and 37	Radium 226

TABLE 2: DETECTION SENSITIVITIES

Survey Type	Detector	Sensitivity <i>a priori, unless noted</i> (dpm/100cm ²)	TSP Section
Alpha Scan	SCM	98.3% probability of seeing greater than or equal to 100 dpm/100cm ² (Note 1)	2.7.1
	43-68	96.9% probability of seeing greater than or equal to 1 count in 8 seconds	
Alpha Static	SCM	87.9	2.8.1
	43-68	71.9	

Notes:

1. Sensitivity has been recalculated *a posteriori* for "coincidence" counting with a threshold of 3 counts or greater. See [Section 8.2.1](#) for discussion.

cm² Centimeter squared
dpm Disintegrations per minute
SCM Surface Contamination Monitor
TSP Task Specific Plan

TABLE 3: SUMMARY OF ALPHA MAXIMUMS SURFACE CONTAMINATION MONITOR AND DIRECT SURVEY RESULTS

Building 5 Survey Unit	SCM ¹ Maximum (dpm/100 cm ²)	Direct ² Maximum (dpm/100 cm ²)	Removable Contamination (Yes/No)	Notes
SU 1 Floors	0	83	No	
SU 1 Walls	0	95 (see side notes)	No	Maximum value of 95 dpm/100 cm ² on light switch on wall based on hand held survey of areas not accessible to the SCM. Maximum value of 39 dpm/100 cm ² from direct measurement at pre-defined measurement locations
SU 1 Overheads	3	39	No	
SU 2 Floors	28	115³	No	
SU 2 Walls	0	49	No	
SU 2 Overheads	0	40	No	
SU 3 Floors/Walls	0	51	No	
SU 3 Overheads	5	71	No	
SU 4 Floors	20	51	No	
SU 4 Walls	0 ⁴	49	No	
SU 4 Overheads	0	51	No	
SU 5 Floors	24	29	No	
SU 5 Walls	0	49	No	
SU 5 Overheads	5	60	No	
SU 6 Floors/Walls	0	83	No	
SU 6 Overheads	0	49	No	
SU 7 Floors/Walls	0	85 (see side notes)	No	Maximum reading of 85 dpm based on hand held instrument scan and measurement of area not accessible to the SCM. See Appendix G for photograph of location. Maximum reading from direct measurements at predefined locations is 40 dpm/100 cm ²
SU 7 Overheads	0	71	No	

TABLE 3: SUMMARY OF ALPHA MAXIMUMS SURFACE CONTAMINATION MONITOR AND DIRECT SURVEY RESULTS (CONTINUED)

Building 5 Survey Unit	SCM ¹ Maximum (dpm/100 cm ²)	Direct ² Maximum (dpm/100 cm ²)	Removable Contamination (Yes/No)	Notes
SU 8 Floors/ Walls	1,268	534	No	
SU 8 Overheads	1,014	72	No	
SU 9 Floors/ Walls	878	126	No	
SU 9 Overheads	650	65	Yes	
SU 9 Paint Chip	N/A	840 (see side notes)	No	Contamination found on the wall side of the paint chip removed with masking tape.
SU 10 Floors/ Walls	292	136	Yes	
SU 10 Overheads	605	64	No	
SU 11 Floors/ Walls	543	212	No	
SU 11 Overheads	0	40	No	
SU 12 Floors/ Walls	290	136	No	
SU 12 Overheads	59	65	No	
SU 13 Floors/Walls	0	126 ³	No	
SU 13 Overheads	59	75	No	
SU 14 Floors/ Walls	0	126 ³	No	
SU 14 Overheads	0	75	No	
SU 15 Floors/Walls	59	93	No	
SU 15 Overheads	0	75	No	
SU 16 Floors/ Walls	1,360	265	No	
SU 16 Overheads	0	39	No	
SU 17 Floors	971	53	No	
SU 17 Walls	388	61	No	
SU 17 Overheads	429	54	No	

TABLE 3: SUMMARY OF ALPHA MAXIMUMS SURFACE CONTAMINATION MONITOR AND DIRECT SURVEY RESULTS (CONTINUED)

Building 5 Survey Unit	SCM ¹ Maximum (dpm/100 cm ²)	Direct ² Maximum (dpm/100 cm ²)	Removable Contamination (Yes/No)	Notes
SU 18 Floors	78	40	No	
SU 18 Walls	0	39	No	
SU 18 Overheads	74	36	No	
SU 19 Floors/Walls	67	27	No	
SU 19 Overheads	59	27	No	
SU 20 Floors/ Walls	234	233	No	
SU 20 Overheads	383	97	Yes	
SU 21 Floors/ Walls	117	61	No	
SU 21 Overheads	354	93	Yes	
SU 22 Floors/Walls	169	380 (see side notes)	Yes	Maximum reading of 380 dpm based on hand held instrument scan and measurement inside electrical box. See Appendix G for photograph of location. Maximum reading from direct measurements at predefined locations is 51 dpm/100 cm ²
SU 22 Overheads	351	65	No	
SU 23 Floors/Walls	19	51	No	
SU 23 Overheads	0 ⁴	65	No	
SU 24 Floors/Walls	0	40	No	
SU 24 Overheads	0	43	No	
SU 25 Floors/ Walls	5,421	40	No	
SU 25 Overheads	59	65	No	
SU 26 Floors	3	118³	No	
SU 26 Walls	0	31	No	
SU 26 Overheads	0 ⁴	32	No	
SU 27 Floors/Walls	0	42	No	
SU 28 Floors	0	37	No	
SU 29 Floors	0	27	No	

TABLE 3: SUMMARY OF ALPHA MAXIMUMS SURFACE CONTAMINATION MONITOR AND DIRECT SURVEY RESULTS (CONTINUED)

Building 5 Survey Unit	SCM ¹ Maximum (dpm/100 cm ²)	Direct ² Maximum (dpm/100 cm ²)	Removable Contamination (Yes/No)	Notes
SU 30 Floors	39	420 (see side notes)	No	Maximum reading of 420 dpm based on hand held instrument scan and measurement at base of steel column. See Appendix G for photograph of location. Maximum reading from direct measurements at predefined locations is 68 dpm/100 cm ²
SU 30 Walls	0	88	No	
SU 30 Overheads	59	47	No	
SU 31 Floors	0	57	No	
SU 31 Walls	0	37	No	
SU 31 Overheads	0	27	No	
SU 32 Floors	20	37	No	
SU 33 Floors	1,424	2,980 (see side notes)	No	Maximum reading of 2,980 dpm based on hand held instrument scan and measurement at a hand rail. See Appendix G for photograph of location. Maximum reading from direct measurements at predefined locations is 57 dpm/100 cm ²
SU 33 Handrail	N/A	185 (see side notes)	No	Maximum reading of 185 dpm based on hand held instrument scan and measurement at a hand rail. See Appendix G for photograph of location. Maximum reading from direct measurements at predefined locations is 68 dpm/100 cm ²
SU 33 Walls	0	47	No	
SU 33 Overheads	0	27	No	
SU 34 Floors/Walls	0	27	No	
SU 35 Floors/Walls	0	47	No	
SU 35 Overheads	0	45	No	

TABLE 3: SUMMARY OF ALPHA MAXIMUMS SURFACE CONTAMINATION MONITOR AND DIRECT SURVEY RESULTS (CONTINUED)

Building 5 Survey Unit	SCM ¹ Maximum (dpm/100 cm ²)	Direct ² Maximum (dpm/100 cm ²)	Removable Contamination (Yes/No)	Notes
SU 36 Floors/Walls	27	37	No	
SU 36 Overheads	0	27	No	
SU 37 Floors/walls	0 ⁴	55	No	
SU 37 Overheads	59	16	No	
SU 38 Floors/Walls	0	27	No	
SU 38 Overheads	0	37	No	
SU 39 Floors/Walls	39	37	No	
SU 39 Overheads	0	47	No	
SU 40 Floors/Walls	0	27	No	
SU 41 Floors	534	42	No	
SU 41 Walls	117	204	No	
SU 41 Overheads	780	76	No	
SU 42 Floors	0	42	No	
SU 42 Walls	20	53	No	
SU 42 Overheads	39	43	No	
SU 43 Floors/ Walls	273	366	No	
SU 43 Overheads	39	76	No	
SU 44 Floors	420	42	No	
SU 44 Walls	77	53	No	
SU 44 Overheads	527	64	No	
SU 45 Floors/Walls	39	42	No	
SU 45 Overheads	192	54	No	
SU 46 Floors/ Walls	312	42	No	
SU 46 Overheads	468	64	No	
SU 47 Floors	59	64	No	
SU 47 Walls	0	85	No	
SU 47 Overheads	118	65	No	
SU 48 Floors/ Walls	1,631	572	No	
SU 48 Overheads	115	65	No	
SU 49 Floors/Walls	0	75	No	
SU 49 Overheads	410	61	No	

TABLE 3: SUMMARY OF ALPHA MAXIMUMS SURFACE CONTAMINATION MONITOR AND DIRECT SURVEY RESULTS (CONTINUED)

Building 5 Survey Unit	SCM ¹ Maximum (dpm/100 cm ²)	Direct ² Maximum (dpm/100 cm ²)	Removable Contamination (Yes/No)	Notes
SU 50 Floors/ Walls	214	150	No	
SU 50 Overheads	0	43	No	
SU 51 Floors/ Walls	424	161	No	
SU 51 Overheads	0	65	No	
SU 52 Floors/ Walls	351	129	No	
SU 52 Overheads	0	75	No	
SU 53 Floors/ Walls	344	210	No	
SU 53 Overheads	0	29	No	
SU 54 Floors/ Walls	254	37	No	
SU 54 Overheads	39	41	No	
SU 55 Floors/Walls	20	78	No	
SU 55 Overheads	0	47	No	
SU 56 Floors/Walls	188	104³	No	
SU 56 Overheads	0	49	No	
SU 57 Floors	117	72	No	
SU 57 Walls	0 ⁴	270 (see side notes)	No	Maximum reading of 270 dpm based on hand held instrument scan and measurement on window sill. See Appendix G for photograph of location. Maximum reading from direct measurements at predefined locations is 39 dpm/100 cm ² .
SU 57 Overheads	0 ⁵	48	No	
SU 58 Floors/ Walls	2,360	93	No	
SU 58 Overheads	468	54	No	
SU 59 Floors/ Walls	234	54	No	
SU 60 Floors	0	53	No	
SU 60 Walls	39	27	No	
SU 60 Overheads	27	21	No	

TABLE 3: SUMMARY OF ALPHA MAXIMUMS SURFACE CONTAMINATION MONITOR AND DIRECT SURVEY RESULTS (CONTINUED)

Building 5 Survey Unit	SCM ¹ Maximum (dpm/100 cm ²)	Direct ² Maximum (dpm/100 cm ²)	Removable Contamination (Yes/No)	Notes
SU 61	SU 61 (former X-ray room) was not surveyed for alpha activity			
SU 62 Overheads	59	1,050 (see side notes)	Yes	Maximum reading of 1,050 dpm based on hand held instrument scan of area and measurement of area not accessible to the SCM. Contaminated area is on an I beam adjacent to ceiling. See Appendix G for photograph of location. Contaminated area marked with paint. Maximum reading from direct measurements at predefined locations is 47 dpm/100 cm ² .
SU 63 Overheads	0	61	No	
SU 64 Sill	20	59	No	
SU 65 Walls	39	27	No	
SU 66 Floors/ Walls	20	64	No	

Notes:

Release criterion is 100 dpm/100 cm². Bold lettering indicates measurements above the release criterion.

Wall surveys are lower walls up to 6 feet. Overheads are inclusive of upper walls greater than 6 feet and ceilings.

- 1 The number of SCM scan readings is orders of magnitude higher than the number of direct readings. Thus, the maxima are higher for SCM scans. Alpha survey results that do not exceed the threshold value for both primary and recount detectors in every 100 cm² area are recorded as zero (0) values. SCM values are the maximum reading for the survey unit surface therefore, multiple elevated readings may exist within the survey unit. SCM auto generated reports are contained in [Appendix F](#). Review of all SCM reports for each survey unit surface identified in this table is recommended. SCM reports with areas greater than the release criteria will contain an investigation table that will include all 100 cm² areas in excess of the release criteria. Each area will be identified with a strip number. Strip numbering will be identifiable by indelible markings on the surface.
- 2 Direct values are the maximum reading for the survey unit surface therefore multiple elevated readings may exist. Direct survey data for each survey unit area are contained in [Appendix E](#). Review of all direct survey data sheets for each survey unit area listed in this table is recommended. The direct survey data tables will identify all survey locations in excess of the release criteria by number. The locations of those readings can be determined by review of the survey unit maps in the TSP, [Appendix A](#), or locating the marked spot in the field. Spots marked in the field contain the location number.
- 3 Location recorded measurements 1 to 2 counts per minute above the limit and should be investigated further with longer count times, and possible background interference from radon daughter products should be considered.
- 4 Scan surveys with elevated activity were investigated with hand-held instruments. Investigation surveys that did not indicate detectable activity are included in [Appendix K](#). The SCM scan survey results are listed as zero (0).
- 5 Potential grounding issue with SCM. Area must be investigated.

cm ²	Square centimeter	SCM	Surface contamination monitor
dpm	Disintegrations per minute	SU	Survey unit
N/A	Not applicable		

APPENDIX A
TASK SPECIFIC PLAN (ON CD)



Final

**Task Specific Plan
Building 5 Final Status Survey**

**Alameda Point
Alameda, California**

November 17, 2010

Prepared for:

**Department of the Navy
Base Realignment and Closure
Program Management Office West
San Diego, California**

Prepared by:

**ChaduxTt, a Joint Venture of St. George Chadux
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1230 Columbia Street, Suite 1000
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Prepared under:

**Naval Facilities Engineering Command Southwest
Contract Number: N62473-07-D-3213
Delivery Order: 0025**

CHAD-3213-0025-0015

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**FINAL
TASK SPECIFIC PLAN
BUILDING 5 FINAL STATUS SURVEY**

**ALAMEDA POINT
ALAMEDA CALIFORNIA**

NOVEMBER 2010

Prepared for:

Department of the Navy
Base Realignment and Closure
Program Management Office West
Naval Facilities Engineering Command Southwest

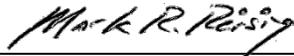
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REVIEW AND APPROVAL



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ACRONYMS AND ABBREVIATIONS

α	Alpha
ε_i	Instrument efficiency
ε_s	Contaminated surface efficiency
B	Background count rate
E	Detector efficiency
G	Source activity
ρ or P	Probability
R_B	Background count rate
t	Time interval of detector over source
T_B	Background counting time
T_{S+B}	Sample counting time
W_A	Area of the detector window
$Z_{1-\alpha}$	Type I decision error level
$Z_{1-\beta}$	Type II decision error level
APP	Accident prevention plan
c	Upper walls and ceiling
cm	Centimeter
cm ²	Square centimeter
cm/sec	Centimeter per second
cpm	Count per minute
Cs-137	Cesium 137
dpm	Disintegrations per minute
DFW	Definable features of work
DU	Depleted uranium
f	Floor
FSS	Final status survey
ft ²	Square feet
H-3	Tritium
HRA	Historical radiological assessment
inch/sec	Inch per second
LBGR	Lower bound of the gray region
m ²	Square meter
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual

ACRONYMS AND ABBREVIATIONS (CONTINUED)

MDC	Minimum detectable concentration
min	Minute
N	Number of data points
NAS	Naval Air Station
NRC	Nuclear Regulatory Commission
pCi/gm	Picocurie per gram
PSPC	Position sensitive proportional counter
Pu-239	Plutonium 239
Ra-226	Radium 226
RASO	Radiological Affairs Support Office
RWP	Radiation Work Permit
SCM	Surface contamination monitor
sec	Second
SIMS	Survey information management system
Sr-90	Strontium 90
SSHP	Site safety and health plan
SOP	Standard operating procedure
TSP	Task specific plan
w	Wall

1.0 INTRODUCTION

This task specific plan (TSP) provides task-specific details for the final status survey (FSS) at Building 5 at the former Naval Air Station (NAS) Alameda, now known as Alameda Point. The survey will be conducted in accordance with the general approach and methodologies that are given in the work plan for Basewide Radiological Surveys at former NAS Alameda ([ChaduxTt 2010a](#)) and standard operating procedures (SOP). The surveys will conform to the requirements of the site safety and health plan (SSHP) ([ChaduxTt 2010b](#)) and accident prevention plan (APP) ([ChaduxTt 2010c](#)) prepared for the survey program. No exceptions to the work plan, SOPs, SSHP or APP are noted.

1.1 SITE DESCRIPTION AND HISTORICAL SUMMARY

Building 5 served as the Overhaul and Repair Shop. It was initially constructed in 1940, although it was remodeled and added to many times. In the final configuration Building 5 was over 910,000 square feet (ft²). The building has a very high ceiling to accommodate aircraft and overhead cranes. A mezzanine runs east and west down the center of the building. Radium dial painting facilities were set up in three different locations in the center section of the mezzanine over the years from 1941 through the mid 1950s. Surveys have detected radium 226 (Ra-226) contamination in several different rooms on the mezzanine. Drain piping from the mezzanine was contaminated by disposal of liquid radium waste. The drain piping was connected directly to the storm drain system on the west side of the building. The drain piping has been subsequently removed. Depleted uranium (DU) counterweights were handled and stored on the main floor. Tritium (H-3) exit signs were stored in the former x-ray room on the first floor. Aircraft engine overhaul performed on engines that were exposed to nuclear test fallout was conducted at former NAS Alameda during 1951. The exact on site location of the overhaul is not known. However, Building 5 was one of 3 identified engine overhaul facilities at former NAS Alameda. Radionuclides of concern involved in the engine overhaul are cesium 137 (Cs-137), strontium 90 (Sr-90) and plutonium 239 (Pu-239).

During the 1940s and 1950s, the radium painting facilities and instrument shops occupied several locations on the mezzanine. In early 1944, former NAS Alameda submitted a request for funds to make several modifications to Building 5. One of the proposed modifications was enlarging and rearranging the instrument shop where the radium painting facility was located. In 1945, a request was issued for information regarding new tools or methods to improve the application of the radium paint. The request also asked for information on applying radium paint using silkscreen methods. A 1946 drawing showing the planned alterations to the instrument shop radium paint room reveals that the original (pre-November 1946) radium paint room was located in the west end of the mezzanine center section of Building 5. The alterations included moving the radium paint room to the east end of the center section of the mezzanine.

In 1954, former NAS Alameda moved the radium paint shop portion of the instrument shop to a third location in the middle section of the mezzanine. There were no documented reports of violations of radium instrument repair operations. Over the course of approximately 13 years, the radium paint facility occupied three separate sets of rooms on the mezzanine of Building 5.

In the 1950s, operations involving Ra-226 ceased in Building 5 and were transferred to Building 400.

2.0 SURVEY DESCRIPTION

This TSP has been developed to address the areas impacted by operations associated with radium dial painting and instrument handling. Surveys to address the potential for DU, Cs-137 and Sr-90 on the first floor will be addressed in a separate TSP.

This survey is being performed to assess if residual activity is above the established release criteria, as defined in Table 6-1 of the Work Plan ([ChaduxTt 2010a](#)). Scan and fixed point surveys will be performed on the second floor in the designated former radium paint shops, instrument shops, pathways from the instrument shops to the first floor plane staging areas, as well as buffer areas around those rooms. The pathways will include both the elevator and stairwell leading to the first floor and a portion of the first floor adjacent to the elevator door and the stairwell. First floor scan and fixed point will include areas below the radium instrument rooms which include the area in which the drain piping has been removed. Additional swipe surveys will be performed in the former x-ray room in the southeast corner of the building, in which H-3 exit signs were stored. Surveys will be performed at accessible points of ventilation systems above the first floor and at ventilation outlets (on the outside of the building) leading from the former radium paint shop rooms.

2.1 SURVEY PREPARATION AND REMEDIATION ACTIVITIES

The radium paint shop rooms will be prepared for surveying by exposing floors and ceilings. Tile flooring will be removed exposing the concrete surface to conduct the required scan and fixed measurement surveys. It is assumed that all floor tiles contain asbestos. Materials containing asbestos will be removed by a certified asbestos abatement contractor. False ceilings, abandoned wiring, and ventilation ducts will be removed. Materials will be surveyed for release in accordance with SOP-012, *Release of Materials and Equipment* (Appendix B of the Work Plan [[ChaduxTt 2010a](#)]). Materials with radioactivity above the limits specified in Table 6-1 of the work plan will be packaged for storage and subsequent disposal. Materials that cannot be surveyed, such as pieces of tile, will be considered radioactive and will be packaged for storage and subsequent disposal. Survey area preparation activities will be performed under radiological controls established in the SOPs. A listing of applicable SOPs for both preparation and survey activities is provided in [Table 1](#). Surveys conducted in support of area preparation activities can provide input into final status surveys, but will not be used to demonstrate compliance with the release criteria for the building.

No remediation activities are expected to be performed on the first floor. Materials that are presently stored on the first floor of Building 5 that interfere with survey activities will be relocated to other areas within the building. General housekeeping by broom sweeping areas will occur if survey areas on the first floor contain dirt, dust, or small debris that would interfere with the surveys.

2.2 RELEASE CRITERIA

The release criteria for Ra-226 is 100 disintegrations per minute (dpm) per 100 square centimeters (cm²) total surface activity, for H-3 it is 5,000 dpm/100 cm² total surface activity (ChaduxTt 2010a). The removable contamination release criteria is one-fifth of the total activity limits (ChaduxTt 2010a). The limits for the specific radionuclides to be addressed in Building 5 are provided in Table 2.

2.3 REFERENCE AREA

The reference area will be selected with the approval of Navy Radiological Affairs Support Office (RASO). The reference areas for the Building 5 survey will consist of concrete floors and walls, sheetrock metal ceiling material and other materials of construction that may be identified during remediation activities. The reference materials will be identified in buildings near Building 5 that have no history of containing radioactive material. The reference area survey data will be obtained prior to final recording of surveys within Building 5 and will be included in the Building 5 FSS. Reference areas for surveys performed to determine compliance with Ra-226 criteria are not required due to the application of particle detection theory which does not subtract reference values.

2.4 INVESTIGATION LEVELS

Investigation levels for the surveys will be 100 dpm/100 cm² for Ra-226 and 5,000 dpm/100 cm² for H-3 (ChaduxTt 2010).

2.5 SURVEY UNITS AND CLASSIFICATION

Building 5 is a large facility designed for the maintenance of aircraft. It has a footprint of approximately 910,000 ft². The radium paint shops are on a mezzanine level that runs east and west through the middle of the building. All former radium paint shop and instrument shop rooms are Class 1 areas, requiring 100 percent scan survey of floors and walls up to 6 feet. The hallways, men's and women's rooms along the south side of the instrument shops as well as elevator and stairwell leading to the first floor are also Class 1 areas. The northern edge of the paint shop and instrument shop areas have windows about 35 inches from the floor essentially the entire length of the area. Previous surveys of the window sills have identified contamination which has been remediated. However the outside sills have not been surveyed. The outer sills will be surveyed as a Class 1 area. The outer walls below will be surveyed as a Class 2 area. Ventilation outlets (on the outside of the building) leading from the former radium paint shop rooms will also have a Class I survey.

Class 2 surveys requiring 50 percent surface scan surveys will be conducted in the upper areas of the Class 1 rooms greater than 6 feet and ceilings and buffer areas around the Class 1 areas. Buffer areas will have Class 2 scan surveys performed on the floors and walls up to 6 feet. Figure 1 identifies the former paint shop rooms, buffer areas and designated survey units.

The first floor area beneath the radium paint shops originally housed the small parts paint shops. The paint shops have been removed. The radium paint shop drain lines that penetrated into the paint shops have been removed from the area. The northeast corner of the area is at column line 13. The area bounded by column line 13 on the east, column 8 on the west, the wall adjoining the breezeway on the north and the wall separating the area from the large hanger bays on the south will be surveyed as a Class 1 area. Walls to 6 feet will be surveyed as a Class 1 area. The area will be subdivided into survey units not to exceed 100 square meters (m²). Additionally, a 6 foot wide strip of the both the north and east walls adjacent to the northeast corner, directly below the drain pipe penetration, will be surveyed as a Class 1 area. Similarly, a 6 foot wide strip on the south wall beneath the second penetration will be surveyed as a Class 1 area with 6 foot Class 2 buffer areas on both sides. A 10 foot wide Class 2 floor area will be surveyed in the breezeway (area between Building 5 and 5A) between columns 13 and 2.

Class 1 areas on the ceiling will include a 6 foot by 6 foot area in the northeast corner around the first penetration and an approximately 12 foot by 6 foot area surrounding the second penetration. Each Class 1 ceiling area will have a 6 foot Class 2 buffer around it.

The west end of the small parts paint shops extending from column 2 to column 4, the area directly under the stack area on the mezzanine will be surveyed as a Class 1 survey area. 100 percent of floors and walls below 6 feet will be surveyed. Each former paint booth, defined by concrete divider walls, will be a unique survey area. A 6 foot Class 2 buffer will be surveyed above the Class 1 wall areas.

The former X-ray room has been used for storage of tritium exits signs. The low energy beta particles emitted by H-3 are not able to be detected with scan survey equipment due to the Mylar covering over the detector chamber. The former X-ray room will be surveyed as a Class 1 area with swipe surveys obtained at the systematic sample locations described in [Section 2.6](#). The walls above 6 feet and the ceilings will be surveyed as a Class 2 area. Swipe surveys in the former X-ray room will be analyzed for H-3. The former X-ray room layout is shown in [Figure 63](#).

[Figure 2](#) provides the footprint of the first floor areas potentially impacted by the radium due to drain pipe removal and other potential communications with the radium painting area above. Area classification and floor survey units are identified. [Figures 30 through 42](#) and [Figures 64 and 65](#) identify the classification for individual survey units including floors, walls and ceilings.

Building 5 layout of the second floor impacted area identifying the area classifications is provided as [Figure 1](#). The approximate size of the floors, wall up to 6 feet and walls above 6 feet plus the ceiling for each area are provided in [Figures 3 through 29](#) and [43 through 62](#). A survey unit designation for each room or partial floor area is included in each figure. Each final survey unit designator will include an indicator, f (floor), w (wall) or c (upper walls and ceiling). Class 1 rooms or areas for which the floor plus walls up to 6 feet total surface area is less than 100 m², and those areas will be surveyed as a single survey unit. As an example, in Survey Unit 1 (see [Figure 3](#)) there will be two Class 1 survey units designated, SU-1(f) at 55.3 m² and SU-1(w) at 58.2 m², and one Class 2, SU-1(c) at 161.8 m².

If additional survey units, or changes to existing units are required following demolition of ceilings, access to ventilation exhaust points, etc. additional figures will be created and submitted to the NAVY for concurrence. Additional survey units, or changes to existing survey units will be documented in the FSS Report for Building 5.

Each survey unit will contain systematic data collection locations. At each systematic sample location, a direct surface measurement, gamma exposure rate and swipe survey will be obtained. In the former X-ray room, systematic wet swipe surveys will be collected and analyzed with liquid scintillation counting to determine the presence of H-3. All other swipe surveys will be analyzed in accordance with SOPs. The number (N) of systematic locations has been determined in [Section 2.6](#) to be a minimum of 17. Using a random start point, the systematic data collection locations (N) have been laid out in a triangular grid pattern for each survey unit using the computer process provided by Visual Sample Plan ([Gilbert et al. 2001](#)). Locations for the systematic data collection are provided in [Figures 3 through 63](#). Those figures show that areas in which the floors and walls are separate survey units will have a minimum of 17 locations in each area. For each figure, location numbers are not duplicated to avoid confusion in linking data to a specific location within a survey unit and a room or area.

2.6 ESTABLISHING THE NUMBER OF MEASUREMENTS

To determine the number of measurements, N, to be taken per survey unit when the contaminant is not present in background, Equation 4-2, of the work plan ([ChaduxTt 2010a](#)), is used:

Equation 4-2 from the Work Plan ([ChaduxTt 2010a](#))

$$N = \left(\frac{(Z_{1-\alpha} + Z_{1-\beta})^2}{4(\text{Sign } \rho - 0.5)^2} \right) (1.2)$$

Where:

N = Number of data points

$Z_{1-\alpha}$ = Type I decision error level, 1.645

$Z_{1-\beta}$ = Type II decision error level, 1.645

$\text{Sign } \rho$ = random measurement probability, 0.945201

1.2 = 20 percent increase in number of samples over the minimum

The values used in the calculation are from Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) guidance ([Nuclear Regulatory Commission \[NRC\] 2000](#)) and are based on a recommended value for the lower bound of the gray region (LBGR) of 1.6 as discussed in Section 4.2.1 of the work plan ([ChaduxTt 2010a](#)). Type I and Type II decision errors are based on 0.05 false negative and 0.05 false positive rates. The associated Z values are obtained from MARSSIM Table 5.2 ([NRC 2000](#)). The random measurement probability, $\text{Sign } \rho$, is from MARSSIM Table 5.4 ([NRC 2000](#)).

Using the defined values, the equation becomes:

$$N = \left(\frac{(1.645 + 1.645)^2}{4(0.945201 - 0.5)^2} \right) (1.2)$$

The calculation results in a value of $N = 16.38$. Therefore, a minimum of 17 measurements will be obtained in each survey unit.

2.7 ALPHA SCAN MEASUREMENTS

Scan measurements are performed to identify elevated areas of radioactivity within the survey unit. Alpha (α) scans will be effective for identifying elevated concentrations of Ra-226. One hundred percent of accessible surface areas in the Class 1 survey units, 50 percent of those in the Class 2 survey units, and 25 percent of those in the Class 3 survey units will be scanned with the Surface Contamination Monitor (SCM) or the Ludlum 43-68 gas flow proportional detectors coupled to a Ludlum 2221.

The SCM utilizes a gas flow position sensitive proportional counter (PSPC). The PSPC functions as any gas flow proportional counter, using P-10 as the counting gas. As in any proportional counter, voltage plateaus are established for the detection of alpha or alpha plus beta particles. High voltage appropriate for the type of particles to be detected is applied to the single anode wire which runs the length of the detector. The SCM computer compares the pulse heights of pulses sensed at each end of the anode wire and establishes the location on the anode wire where the pulsed was sensed. Although the available resolution is greater than 2,000 locations on the anode wire, the SCM computer will “bin” the data in 5 centimeters (cm) wide increments along length of the wire.

The SCM can be operated in both a dynamic or “rolling” mode or a static or “corner” mode. In the dynamic mode, the system uses a direct current powered drive motor affixed to a cart which contains all electronics and computer hardware, and a detector (or two) is mounted to the front of the cart. The SCM’s design focuses on the elimination of human issues associated with performing surveys of large areas. The system is designed such that surveys are performed at constant speed, the detector held at a set distance from the surface being surveyed, and survey data recorded automatically. In the dynamic mode, a precision wheel encoder is mounted to the cart axle to determine distance traveled by the cart. The encoder can measure to a small fraction of a centimeter and is used to trigger the computer to capture data for every 5 cm of travel of the SCM cart. The result is count data (counts) for every 5 cm “bin” for every 5 cm of travel, or a matrix of 25 cm² “pixels” of data. In the static mode, a preset time is applied to the collection of data from a stationary detector. Data is binned in a manner similar to the dynamic mode.

Data is transferred from the SCM to a processing station containing the Survey Information Management Systems (SIMS) software via removable media. SIMS software is used to “stitch” the individual strips of data to create a single survey of an entire area. The data collected in 25 cm² “pixels” is summed with adjacent “pixels” in a manner that will result in the evaluation of

every possible 100 cm² area. When determining activity, each 25 cm² “pixel” is 25 percent of four overlapping 100 cm² areas. This process ensures that small areas of activity above limits are not missed through grid registration errors.

The SCM will be the primary instrument used to perform alpha surveys. The SCM will be used in the recount mode, using two detectors hard mounted to each other at a set distance. The system will be operated at a target speed of 0.5 inch per second (inch/sec) with detection probability of greater than 95 percent at the release criteria value for Ra-226 of 100 dpm/100 cm² (ChaduxTt 2010a). The probability of detecting two counts due to a source is given by Equation 7-5 from the work plan (ChaduxTt 2010a) below.

Equation 7-5 from the Work Plan (ChaduxTt 2010a)

$$P(n \geq 2) = 1 - \left(1 + \frac{(GE + B)t}{60} \right) e^{-\frac{(GE+B)t}{60}}$$

Where:

$P(n \geq 2)$ = probability of getting two or more counts during the time interval t

t = time interval of detector over source (second [sec])

G = source activity (dpm)

E = detector efficiency (4π)

B = background count rate (count per minute [cpm])

60 = conversion factor, seconds to minutes

Since the detectors associated with the SCM are manufactured to the same specifications, the efficiency of each detector is similar. Therefore, the probability of obtaining two or more counts on each detector as they traverse the same 100 dpm source is the square of the probability for a single detector.

Typical background values observed with the SCM are less than 1 cpm/100 cm². Efficiency (4π) of the SCM for alpha emitters has been measured at 25 percent or greater. The efficiency for a point source would be 50 percent. The detector width is 12 cm. Survey speed for alpha emitters is 1.25 centimeter per second (cm/sec) (0.5 inch/sec). Using these parameters, equation 7-5 from the work plan (ChaduxTt 2010a) becomes:

$$P(n \geq 2) = 1 - \left(1 + \frac{(100 * 0.5 + 1)9.6}{60} \right) e^{-\frac{(100*0.5+1)9.6}{60}}$$

Where:

$P(n \geq 2)$ = probability of getting two or more counts during the time interval t

$$t = 9.6 \text{ sec}$$

$$G = 100 \text{ dpm}$$

$$E = 0.5$$

$$B = 1 \text{ cpm}$$

Therefore:

$$P(n \geq 2) = 0.9974 \text{ or } 99.74\%$$

The probability of both detectors responding with two or more counts from a point source of 100 dpm at a speed of 1.25 cm/sec (0.5 inch/sec) would be the square of a single detector, or:

$$P(n \geq 2)_{2 \text{ det}} = 99.47\%$$

Therefore, the scan speed for the SCM for alpha emitting nuclides will be 1.25 cm/sec (0.5 inch/sec).

For areas that are not surveyed with the SCM due to physical constraints, areas will be scanned with the Ludlum 43-68 gas flow detector and a Ludlum 2221 count rate meter. The surveyor will move the detector at a scan speed of 1.25 cm/sec (0.5 inch/sec) at a height of ¼ to ½ inch above the surface while maintaining audio observation of the instrument. A single count will cause the surveyor to pause and observe the area for an additional eight seconds. The probability of getting a second count from a 100 dpm source is given by MARSSIM equation J-5 (NRC 2000):

MARSSIM Equation J-5 (NRC 2000)

$$P(n \geq 1) = 1 - e^{-\frac{(GE+B)t}{60}}$$

Where:

$P(n \geq 1)$ = probability of getting one or more counts during the time interval t

t = time interval of detector over source (sec)

G = source activity (dpm)

E = detector efficiency (4π)

B = background count rate (cpm)

60 = conversion factor seconds to minutes

Or:

$$P(n \geq 1) = 1 - e^{\frac{-(100 \cdot 0.25 + 1)8}{60}}$$

Where:

$P(n \geq 1)$ = probability of getting one or more counts during the time interval t

$t = 8$ sec

$G = 100$ dpm

$E = 0.25$ (4π)

$B = 1$ cpm

Therefore:

$$P(n \geq 1) = 0.969 = 96.9\%$$

If the surveyor does not observe a second count in the eight second window, the surveyor can continue the scan survey. If a second count is observed during the eight second window, the surveyor will obtain a 2 minute count at that location and record the data with the direct measurement surveys for the survey unit.

2.8 ALPHA STATIC MEASUREMENTS

Alpha static measurements will be obtained with both the SCM and the Ludlum 43-68 detector coupled to the Ludlum 2221 rate meter. The SCM static measurements will supplement the surveys performed in the dynamic or rolling mode when the rolling mode cannot get into areas such as on floors against the wall, on walls where interferences make rolling surveys impractical, or on ceilings above the reach of the SCM. The Ludlum 43-68 detector will be used to obtain fixed measurements at the number of locations identified in [Section 2.5](#).

Static counts for alpha emitting radionuclides obtained with the SCM will utilize the detection probability approach similar to that for the SCM in the dynamic or scan method described in [Section 2.7](#). The SCM will use a single detector; however, 2 data acquisitions of 8 seconds each will be obtained at each location. The surveyor will place the detector against the surface to be surveyed and hold it steady for two 8 second counts. Data will be processed by creating 2 separate surveys of an area, the first 8 second count of each static measurement comprising the first data set and the second 8 second count, the second data set. The second data set will be over-laid on the first, and both sets evaluated for each 100 cm² area. Those areas in which both sets show a positive value above a prescribed threshold, will be indicative of an area in excess of the release criteria. The process assures that areas greater than the release criteria are detected with greater than 95 percent probability while suppressing false positives due to background. The approach is consistent with that of the SCM in the dynamic mode.

The probability of detecting two counts due to a source is given by Equation 7-5 from the work plan (ChaduxTt 2010a) below.

Equation 7-5 from the Work Plan (ChaduxTt 2010a)

$$P(n \geq 2) = 1 - \left(1 + \frac{(GE + B)t}{60} \right) e^{-\frac{(GE+B)t}{60}}$$

Where:

$P(n \geq 2)$ = probability of getting two or more counts during the time interval t

t = time interval of detector over source (second [sec])

G = source activity (dpm)

E = detector efficiency (4π)

B = background count rate (cpm)

60 = conversion factor, seconds to minutes

Since the same detector will be used to acquire data at each location, all factors are equal for the 2 data sets. Typical background values observed with the SCM are less than 1 cpm/100 cm². Efficiency (4π) of the SCM for alpha emitters has been measured at 25 percent or greater. The efficiency for a point source would be 50 percent. The time interval will be 8 seconds. Using these parameters, equation 7-5 from the work plan (ChaduxTt 2010a) becomes:

$$P(n \geq 2) = 1 - \left(1 + \frac{(100 * 0.5 + 1)8}{60} \right) e^{-\frac{(100*0.5+1)8}{60}}$$

Where:

$P(n \geq 2)$ = probability of getting two or more counts during the time interval t

t = 8 sec

G = 100 dpm

E = 0.5

B = 1 cpm

Therefore:

$$P(n \geq 2) = 0.9913 \text{ or } 99.13\%$$

The probability of both detectors responding with two or more counts from a point source of 100 dpm with a count time of 8 seconds would be the square of a single detector, or:

$$P(n \geq 2)_{2 \text{ det}} = 98.27\%$$

Therefore, the count time for the SCM in the static mode will be 8 seconds.

Static measurements for Ra-226 obtained with the Ludlum 43-68 and 2221 rate meter will require a 2 minute count time. The minimum detectable concentration (MDC) calculation for the specified count time from equation 7-10 of the work plan (ChaduxTt 2010a):

Equation 7-10 from Work Plan (ChaduxTt 2010a)

$$MDC = \frac{3 + 3.29 \sqrt{R_B T_{S+B} \left(1 + \frac{T_{S+B}}{T_B}\right)}}{\varepsilon_i \varepsilon_s \frac{W_A}{100 \text{ cm}^2} T_{S+B}}$$

Where:

R_B = background count rate (cpm)

T_B = background counting time (minute [min])

T_{S+B} = sample counting time (min)

ε_i = instrument efficiency (count per particle)

ε_s = contaminated surface efficiency (particle per disintegration)

W_A = active area of the detector window (cm^2)

For the Ludlum 43-68, the equation becomes:

$$MDC = \frac{3 + 3.29 \sqrt{(1)(2) \left(1 + \frac{(2)}{(2)}\right)}}{(0.27)(0.25) \frac{100 \text{ cm}^2}{100 \text{ cm}^2} * (2)}$$

$$MDC = 91.2 \text{ dpm}$$

Where:

$R_B = 1 \text{ cpm}$

$T_B = 2 \text{ min}$

$T_{S+B} = 2 \text{ min}$

$\varepsilon_i = 0.27$

$\varepsilon_s = 0.25$

$$W_A = 126 \text{ cm}^2 \text{ (areas greater than } 100 \text{ cm}^2 \text{ default to } 100 \text{ cm}^2)$$

The specified count times are based on the MDC formula, Equation 7-10 from the work plan ([ChaduxTt 2010a](#)). The count times are useful in determining an instruments ability to meet the required MDC. However, empirically derived values will provide a more accurate assessment of the MDC for a specified count time as recommended by MARSSIM ([NRC 2000](#)). Empirical values will be determined at Alameda Point in conjunction with reference area measurements. With concurrence of RASO, count times determined based on empirical data will be used for static survey measurements.

2.9 EXPOSURE RATE MEASUREMENTS

Gamma exposure rate measurements will be conducted with a Sodium Iodide based Ludlum Model 19. The measurements will be conducted with the instrument at 1 meter from the floor. Gamma exposure rate data will be conducted on a 2 meter by 2 meter grid, covering 100 percent of Class 1 areas, 50 percent of Class 2 areas. Exposure rate measurements will also be performed at each of the systematic data collection locations.

2.10 REMOVABLE CONTAMINATION SURVEYS

Removable contamination will be assessed using Masslinn cloths, monitoring the cloth with a Ludlum 43-68 detector coupled to a Ludlum 2221. The detector will be operated on the alpha plateau for areas previously housing Ra-226. Areas with Masslinn cloth indicating any increase in activity will be re-wiped with Masslinn cloth to determine the specific area that contains the removable contamination. Swipe surveys will be taken at any area indicating above background activity and at least 1 location within each 100 ft² area within a Class 1 or Class 2 areas. Swipe surveys will be taken at floor and sink drains. Wet swipe surveys will be obtained in the former X-ray room and counted off site with liquid scintillation counting to determine the presence of H-3. Swipe surveys will also be performed at each of the systematic data collection locations. All swipe surveys will be counted on a Ludlum 2929. Swipe surveys will be performed and documented in accordance with SOP-006, *Radiation and Contamination Surveys* (see Appendix B of the work plan [[ChaduxTt 2010a](#)]).

2.11 MEDIA SAMPLES

Media sampling, which may consist of sediment obtained from sumps or in floor drains, and sink drains will be performed to support evaluation of compliance with release criteria and to determine specific nuclides as necessary. Sampling may also be performed as an integral part of investigations to determine the cause of elevated measurements. Samples will be controlled in accordance with SOP-009, *Sampling Procedures for Radiological Surveys* (see Appendix B of the work plan [[ChaduxTt 2010a](#)]), and submitted to an off-site laboratory for radiological analysis. One sediment sample per drain, if available will be obtained.

3.0 SITE RESTORATION

No site restoration work will be conducted upon conclusion of surveys in Building 5.

4.0 BUILDING 5 REPORT

Results of the survey that demonstrate that the net residual dose at Building 5 is less than 25 millirem per year, with no single measurement indicating activity greater than the release criteria, will be presented in an FSS Report. Any conclusion, other than a recommendation for unrestricted release, will be presented in a Characterization Report.

5.0 QUALITY CONTROL

The data quality objectives for the survey are provided in [Table 3](#).

Definable features of work (DFW) establish the measures required to verify both the quality of work performed and compliance with project requirements. The DFW for this task is radiological surveys. Description of this DFW and the associated phases of quality control are presented in [Table 4](#).

6.0 ENVIRONMENTAL PROTECTION

The environmental protection requirements have been addressed in the work plan ([ChaduxTt 2010a](#)).

7.0 REFERENCES

- ChaduxTt. 2010a. Final Work Plan for Basewide Radiological Surveys Former Naval Air Station Alameda, Alameda, California. July 23.
- ChaduxTt. 2010b. Final Site Safety and Health Plan for Basewide Radiological Surveys Former Naval Air Station Alameda, Alameda, California. August 6.
- ChaduxTt. 2010c. Final Accident Prevention Plan for Basewide Radiological Surveys Former Naval Air Station Alameda, Alameda, California. August 6.
- Gilbert et al. 2001. *Virtual Sample Plan*. Upgrade version 5.9 released October 29, 2009. Pacific Northwest National Laboratory. Principal authors of Version 5.9 Pulsipher, Wilson, et.al.
- Nuclear Regulatory Commission. 2000. NUREG-1575, *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*, Rev. 1.

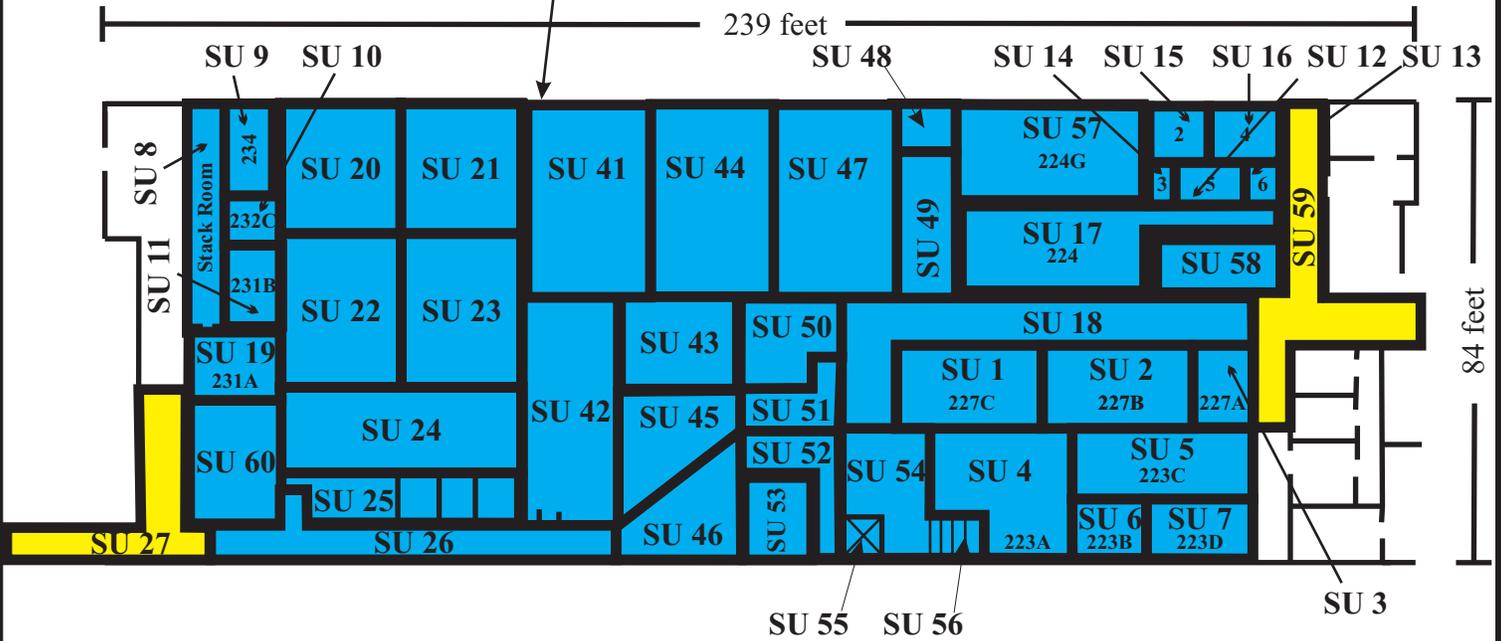
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FIGURES

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Four exterior building ventilation exit points will be surveyed according to SOP 006 sections 6.2.2 and 6.2.3.1. Two on the north wall of SU20, one on the north wall of SU9 and one on the roof above SU50.

SU64 is Class 1 on outer window sills
 SU65 is Class 2 on exterior walls below sills



Floors and walls < 6 feet with combined surface area exceeding 100 m² will be surveyed as separate units. Class 1 survey areas will include walls < 6 feet. Ceilings and walls > 6 feet in areas designated Class 1 will be surveyed as Class 2 areas.

- CLASS 3 AREA
- CLASS 2 AREA
- CLASS 1 AREA
- SU SURVEY UNIT

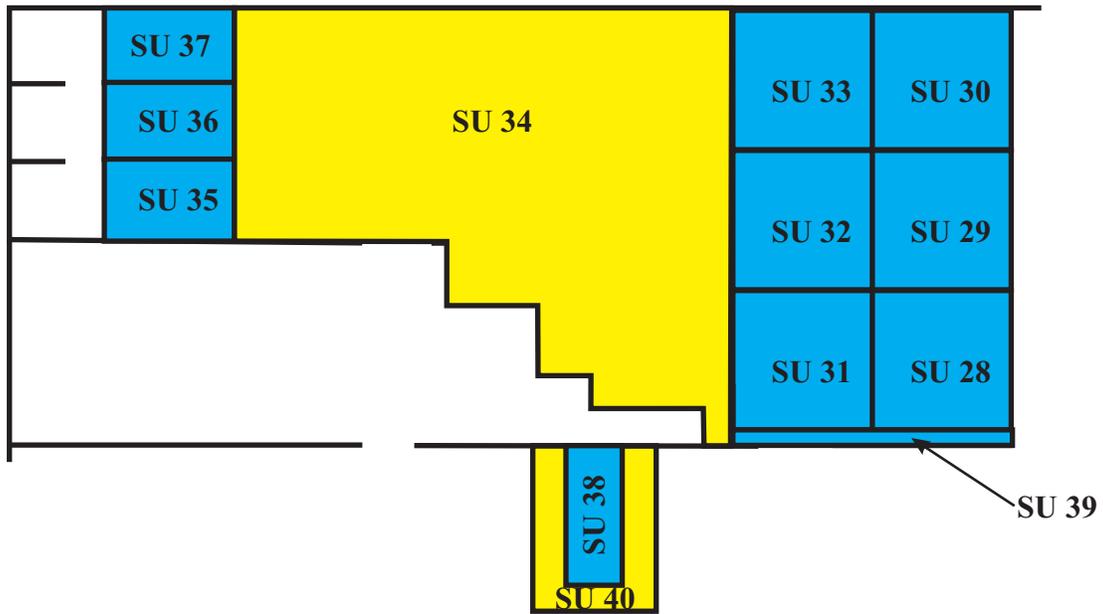


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FIGURE 1
 Building 5 2nd Floor
 Classification And Survey Units

Drawing Not To Scale

Rev 5



Floors and walls < 6 feet with combined surface area exceeding 100 m² will be surveyed as separate units. Class 1 survey areas will include walls < 6 feet. Walls > 6 feet and ceilings in areas designated Class 1 will be surveyed as Class 2 areas. All surveys are for Ra-226.

- CLASS 3 AREA
- CLASS 2 AREA
- CLASS 1 AREA
- SU** SURVEY UNIT



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FIGURE 2
 Building 5 1st Floor
 Classification And Survey Units

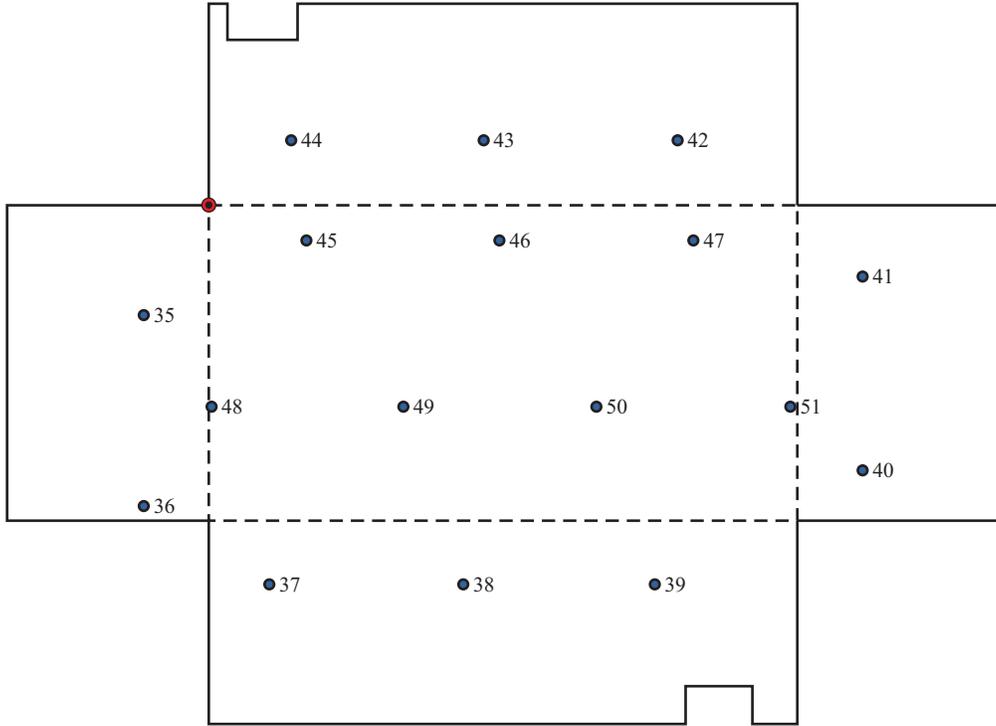
Drawing Not To Scale

Rev 2

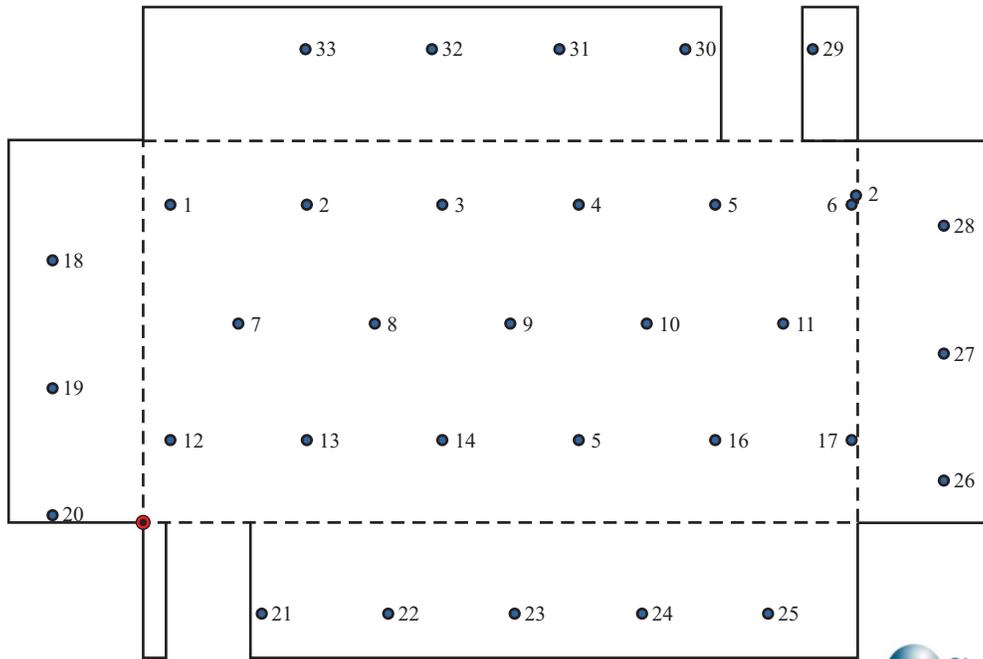
Floor: 55.3 m²

Walls below 6 feet: 58.2 m²

Ceiling and walls above 6 feet: 161.8 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet



Sample Point



South West Corner Reference

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FIGURE 3
Survey Unit 1 - 227C
Sample Points

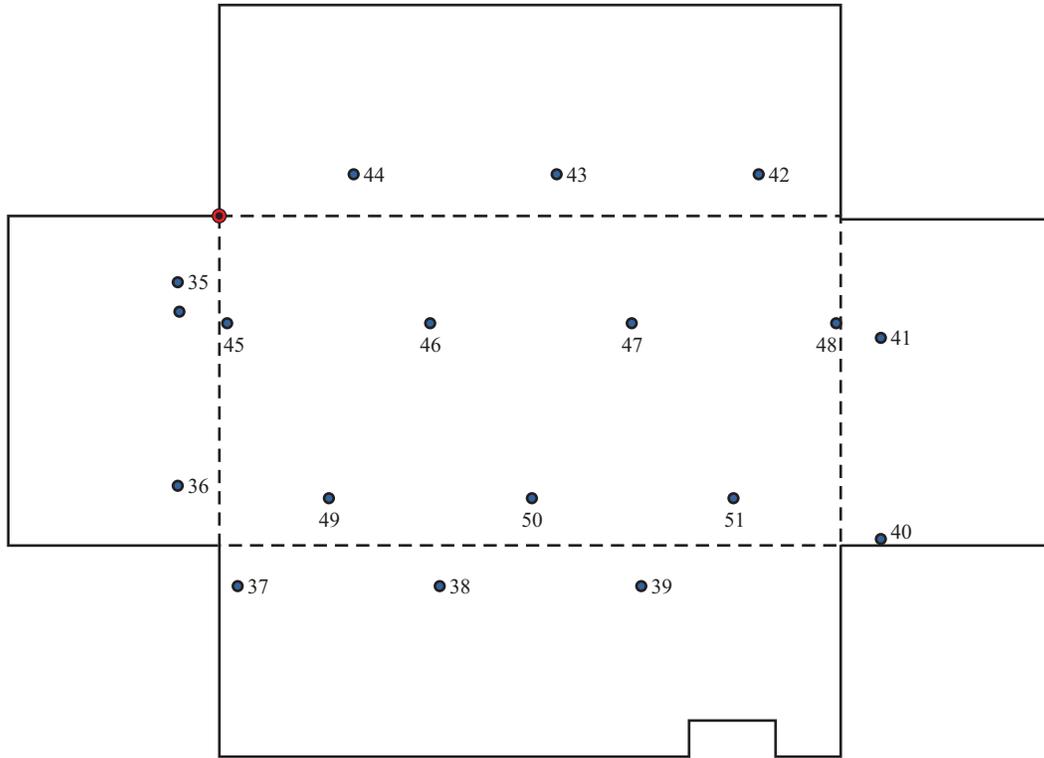
Drawing Not To Scale

Rev 2

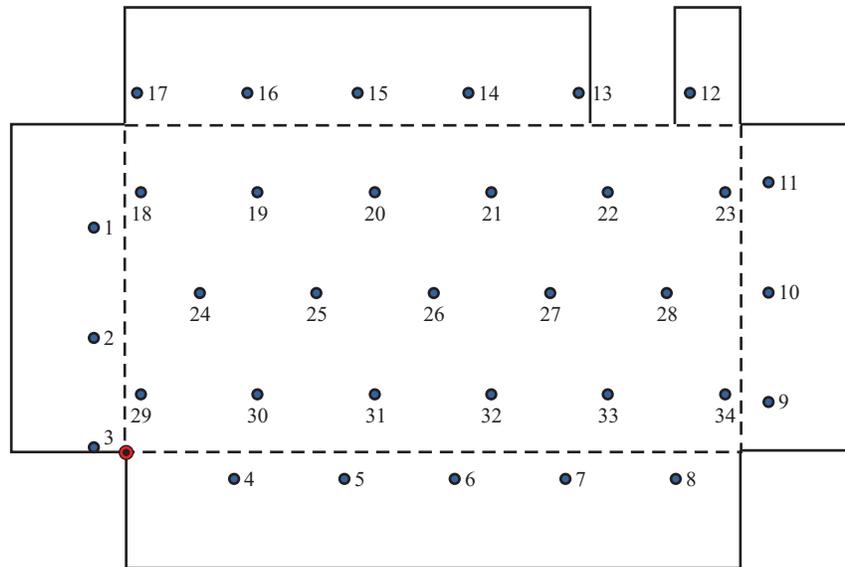
Floor: 50.5 m²

Walls below 6 feet: 54.76 m²

Ceiling and walls above 6 feet: 150.3 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 Sample Point

 South West Corner Reference



Alameda Point, Alameda, California

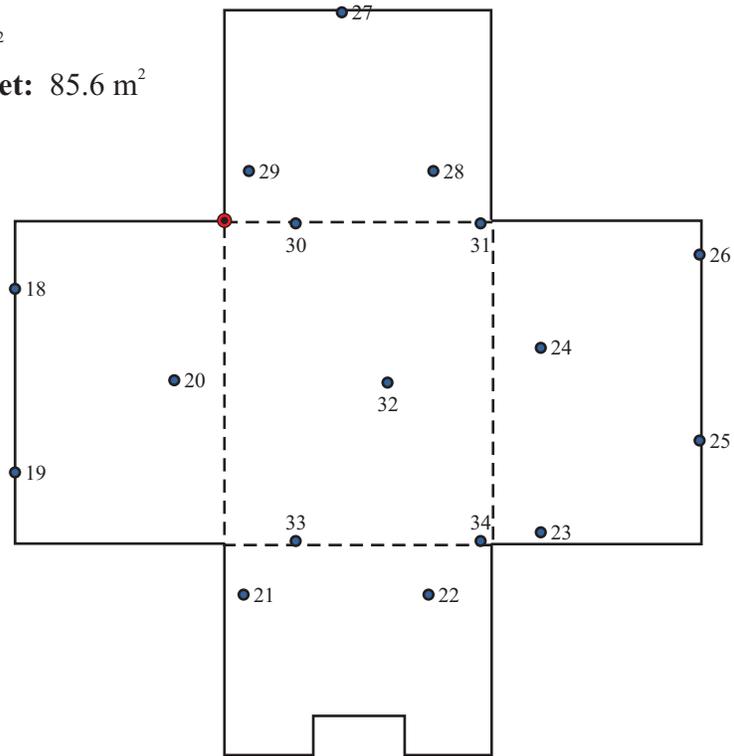
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FIGURE 4
Survey Unit 2 - 227B
Sample Points

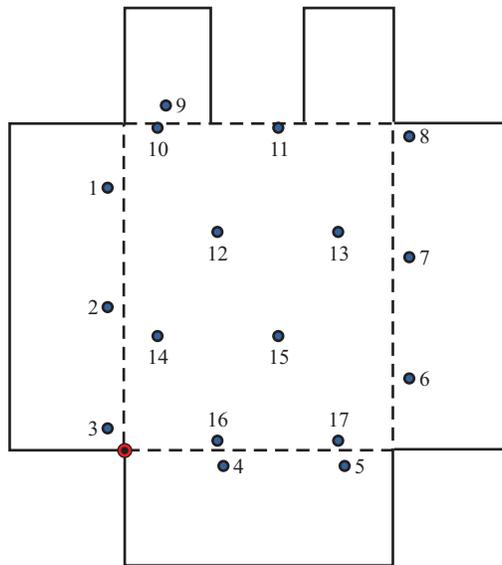
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Rev 2

Floor: 22.1 m²
Walls below 6 feet: 34.63 m²
Ceiling and walls above 6 feet: 85.6 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



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FIGURE 5
Survey Unit 3 - 227A
Sample Points

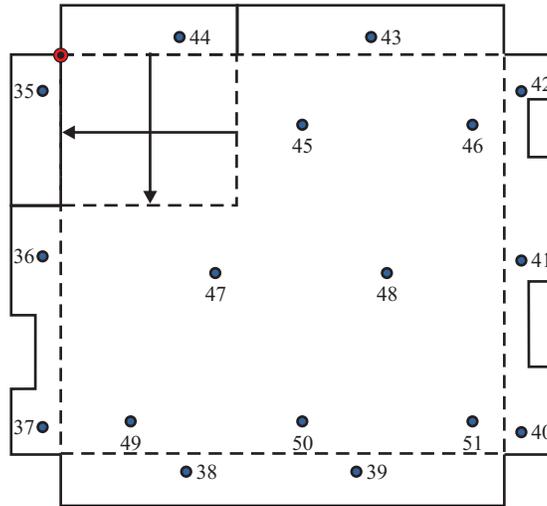
Drawing Not To Scale

Rev 2

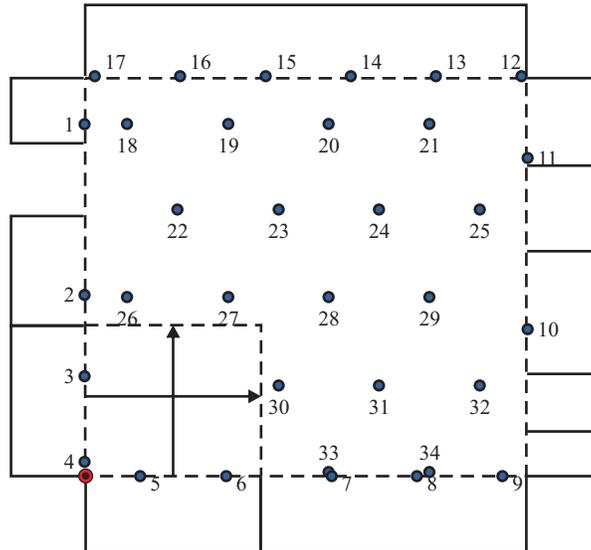
Floor: 89.9 m²

Walls below 6 feet: 75.4 m²

Ceiling and walls above 6 feet: 140.3 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



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FIGURE 6
Survey Unit 4 - 223A
Sample Points

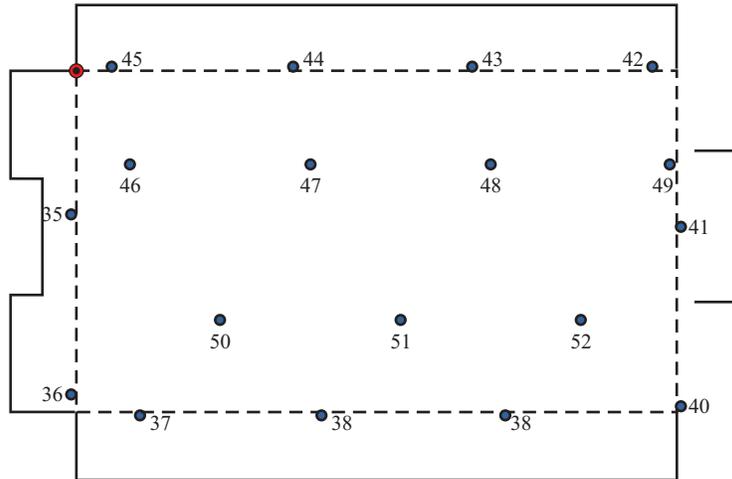
Drawing Not To Scale

Rev 2

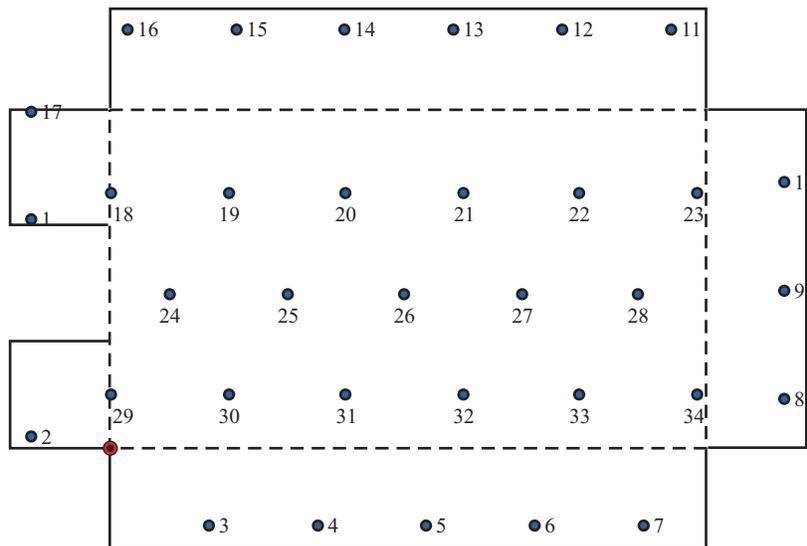
Floor: 68.6 m²

Walls below 6 feet: 63.2 m²

Ceiling and walls above 6 feet: 110.7 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet



Sample Point



South West Corner Reference



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FIGURE 7
Survey Unit 5 - 223C
Sample Points

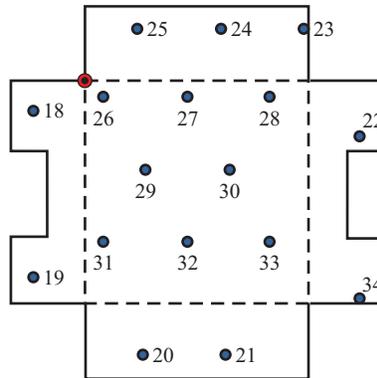
Drawing Not To Scale

Rev 2

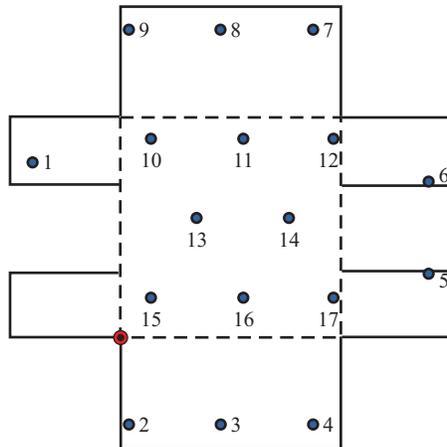
Floor: 13.4 m²

Walls below 6 feet: 26.8 m²

Ceiling and walls above 6 feet: 31.3 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



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FIGURE 8
Survey Unit 6 -223B
Sample Points

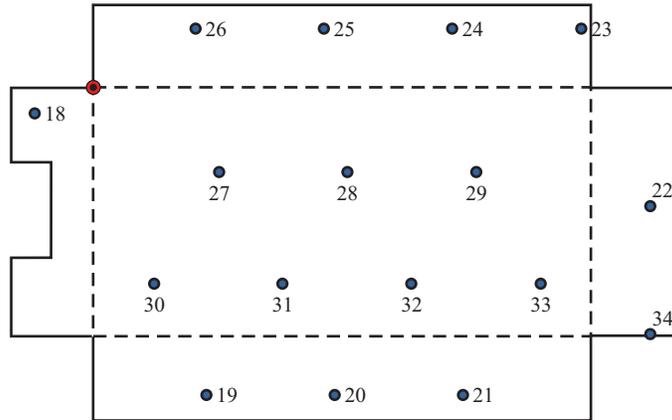
Drawing Not To Scale

Rev 3

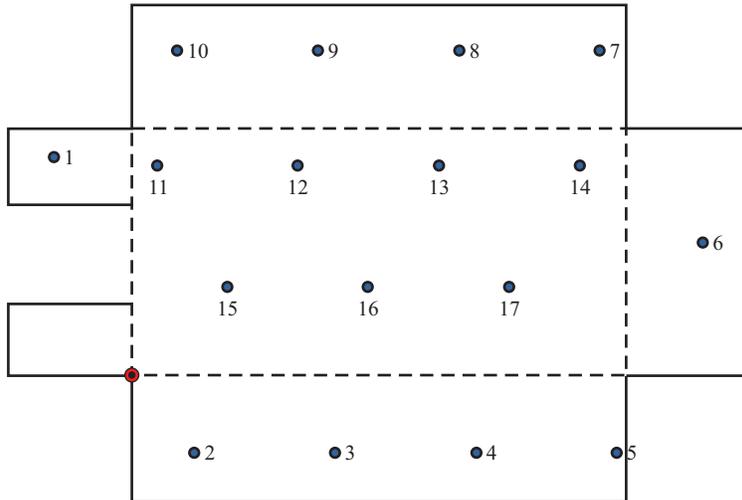
Floor: 26.8 m²

Walls below 6 feet: 40.2 m²

Ceiling and walls above 6 feet: 53.6 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



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FIGURE 9
Survey Unit 7 - 223D
Sample Points

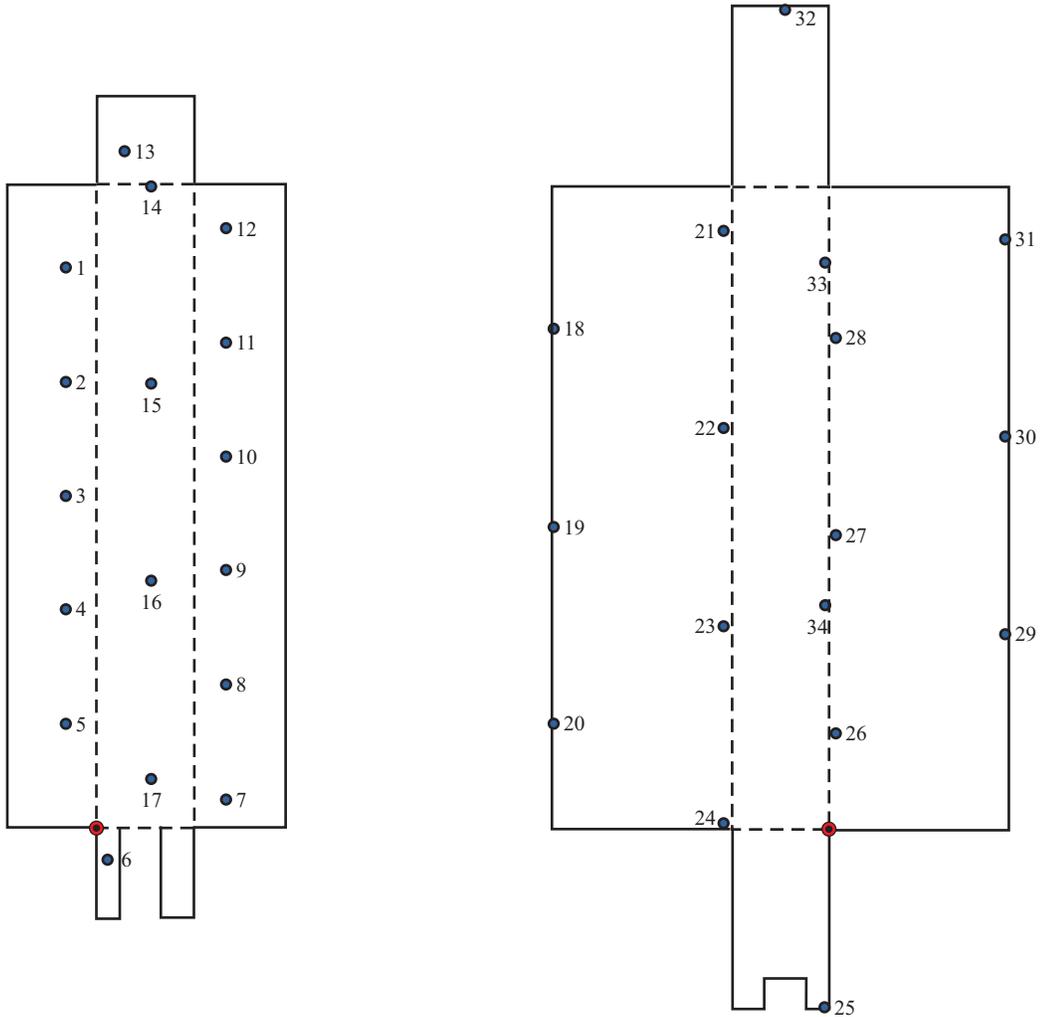
Drawing Not To Scale

Rev 2

Floor: 32 m²

Walls below 6 feet: 66.5 m²

Ceiling and walls above 6 feet: 164.9 m²



Class 1: Floor and Walls < 6 Feet

Class 2: Ceiling and Walls > 6 Feet

● Sample Point

● South West Corner Reference



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FIGURE 10
Survey Unit 8 - Stack Room
Sample Points

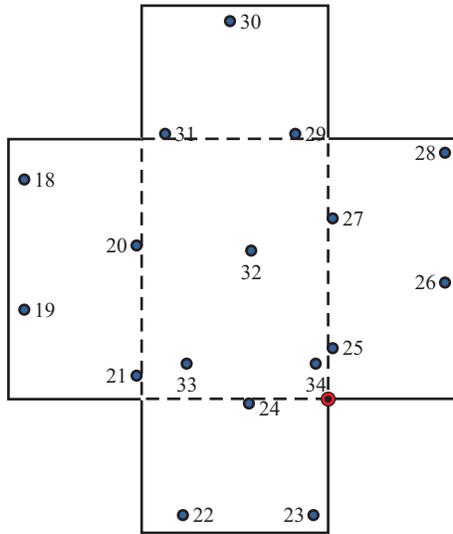
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Rev 2

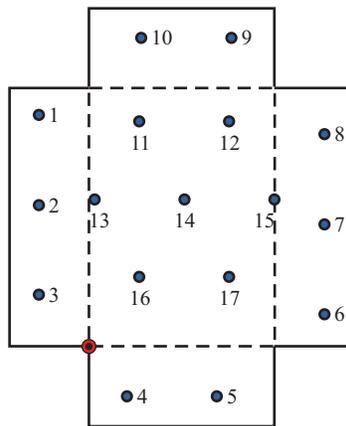
Floor: 25.4 m²

Walls below 6 feet: 37.4 m²

Ceiling and walls above 6 feet: 87.7 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



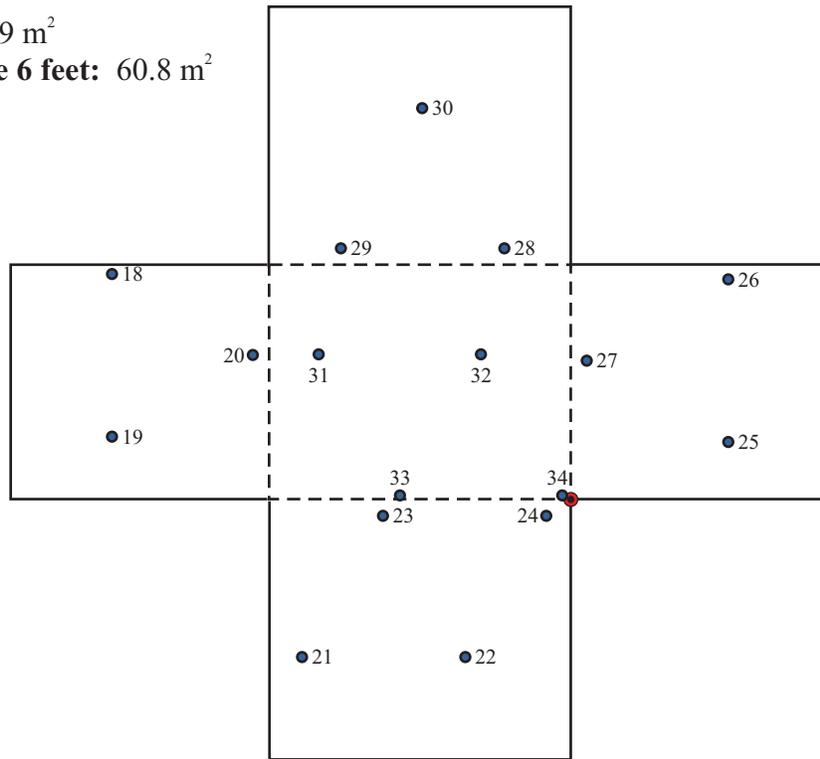
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FIGURE 11
Survey Unit 9 - 234
Sample Points

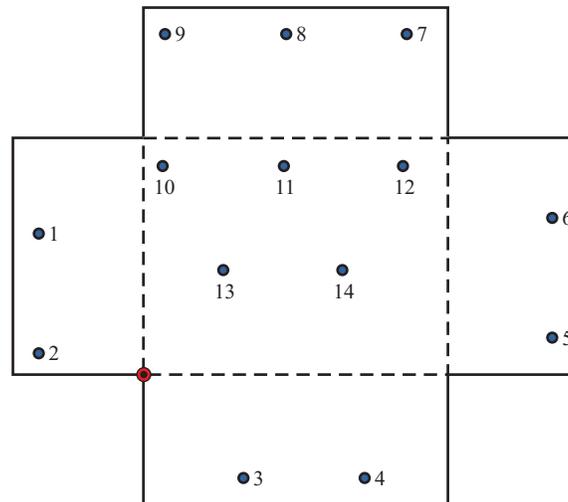
Drawing Not To Scale

Rev 2

Floor: 14.3 m²
Walls below 6 feet: 27.9 m²
Ceiling and walls above 6 feet: 60.8 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

-  **Sample Point**
-  **South West Corner Reference**



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FIGURE 12
 Survey Unit 10 - 232C
 Sample Points

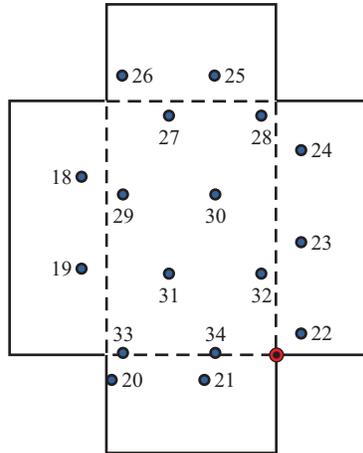
Drawing Not To Scale

Rev 1

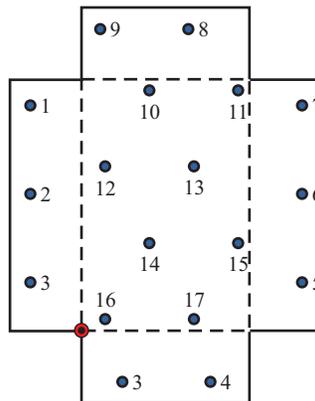
Floor: 27.3 m²

Walls below 6 feet: 39.1 m²

Ceiling and walls above 6 feet: 79.4 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



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FIGURE 13
Survey Unit 11 - 231B
Sample Points

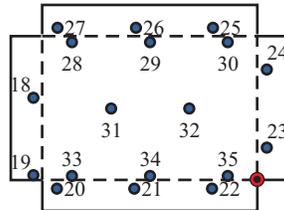
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Rev 1

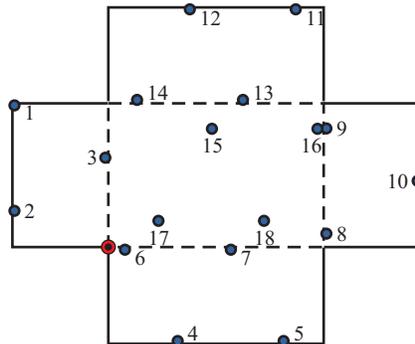
Floor: 11.2 m²

Walls below 6 feet: 25.3 m²

Ceiling and walls above 6 feet: 19.7 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 14
Survey Unit 12 - 5
Sample Points

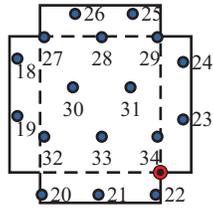
Drawing Not To Scale

Rev 1

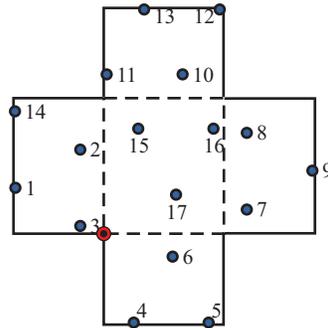
Floor: 6.6 m²

Walls below 6 feet: 19.1 m²

Ceiling and walls above 6 feet: 13.0 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 15
Survey Unit 13 - 6
Sample Points

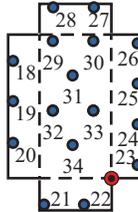
Drawing Not To Scale

Rev 1

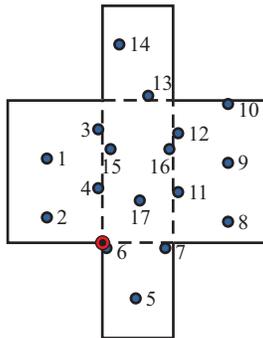
Floor: 3.7 m²

Walls below 6 feet: 15.1 m²

Ceiling and walls above 6 feet: 8.8 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 16
Survey Unit 14 - 3
Sample Points

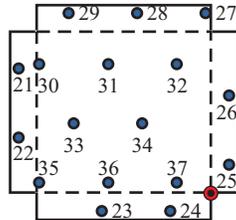
Drawing Not To Scale

Rev 1

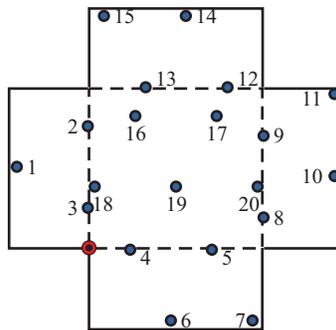
Floor: 14.3 m²

Walls below 6 feet: 28.1 m²

Ceiling and walls above 6 feet: 23.8 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 17
Survey Unit 15 - 2
Sample Points

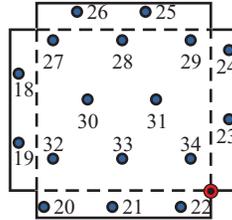
Drawing Not To Scale

Rev 1

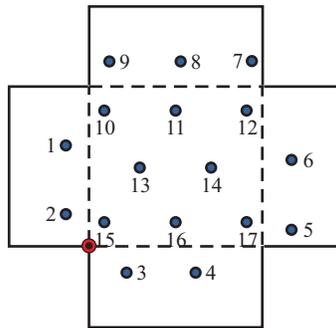
Floor: 14.3 m²

Walls below 6 feet: 28.1 m²

Ceiling and walls above 6 feet: 23.8 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 18
Survey Unit 16 - 4
Sample Points

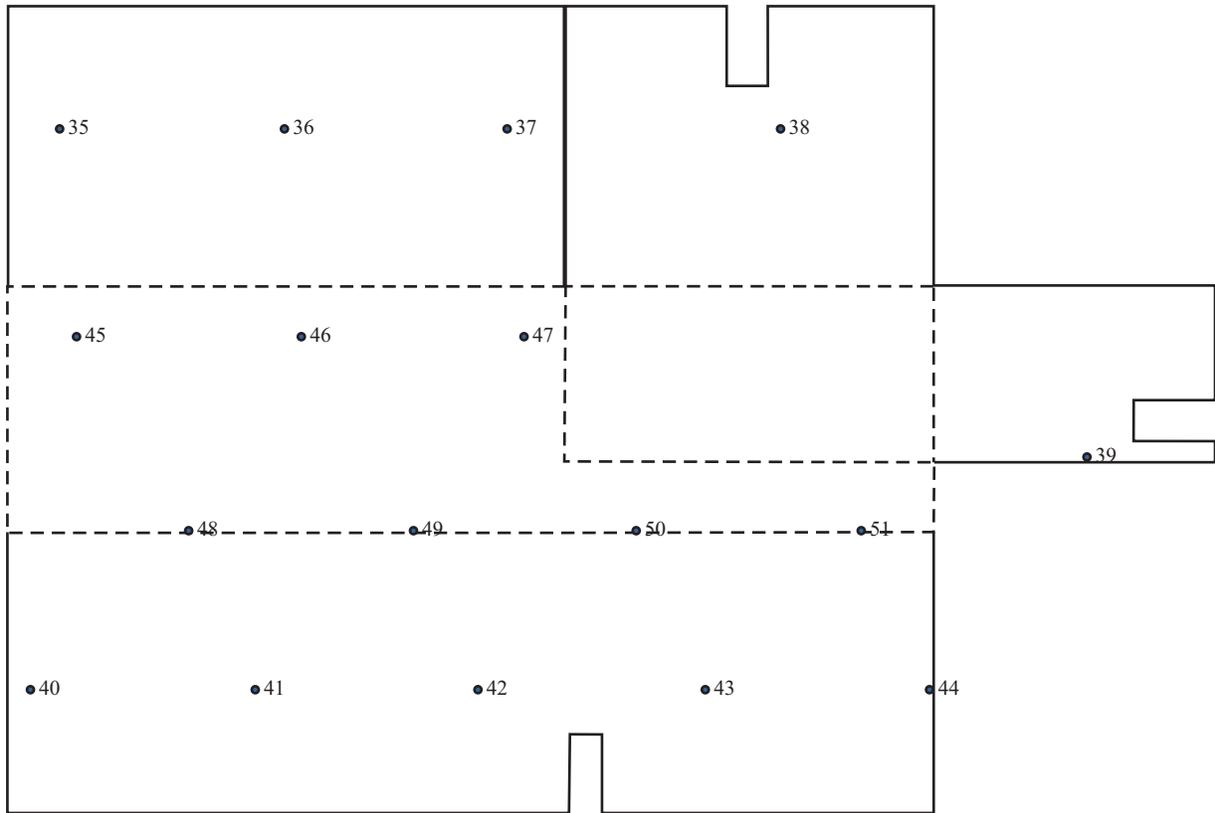
Drawing Not To Scale

Rev 1

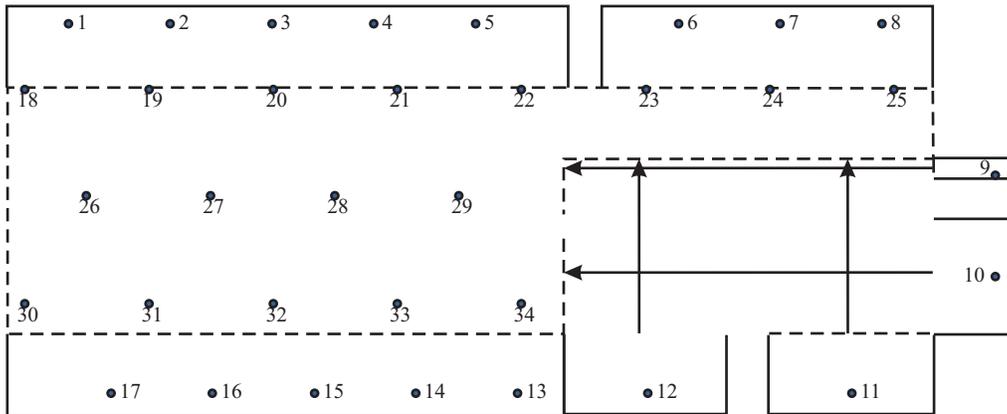
Floor: 99.6 m²

Walls below 6 feet: 64.3 m²

Walls above 6 feet and ceilings: 455.8 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 19
Survey Unit 17 - 224
Sample Points

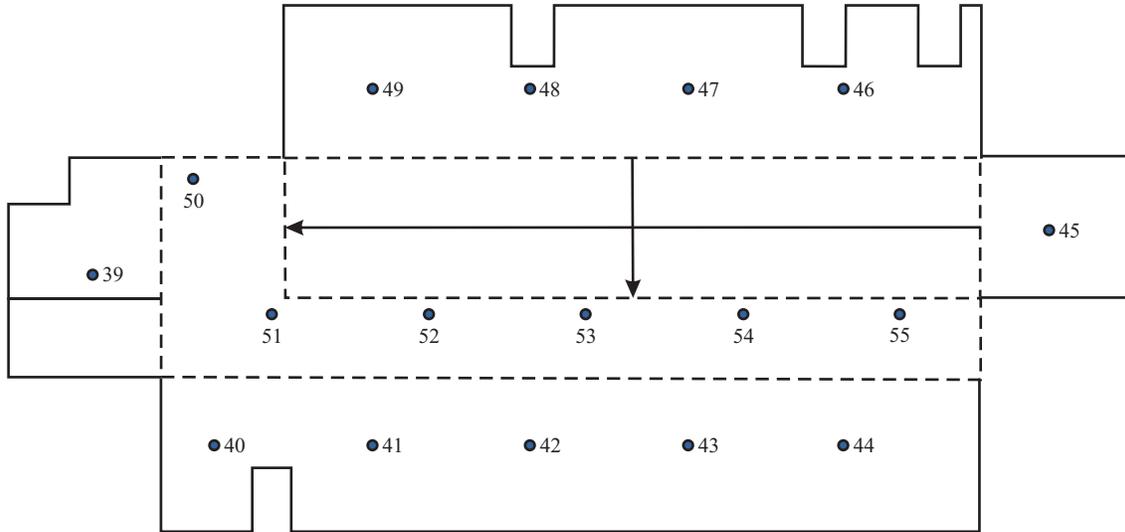
Drawing Not To Scale

Rev 2

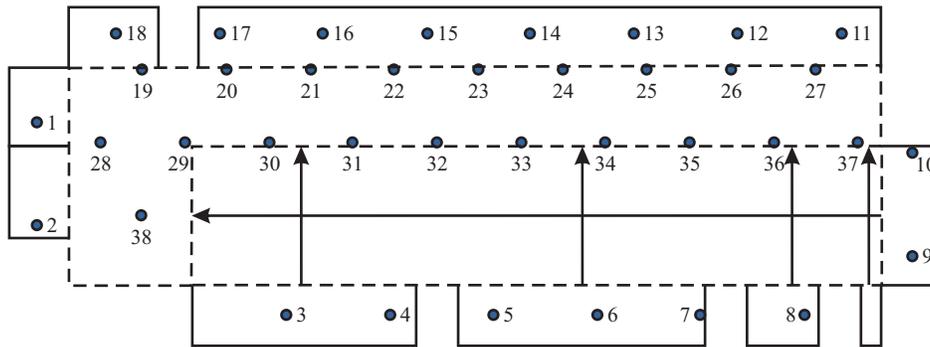
Floor: 89.2 m²

Walls below 6 feet: 96.0 m²

Walls above 6 feet and ceilings: 393.5 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 20
Survey Unit 18 - Hallway
Sample Points

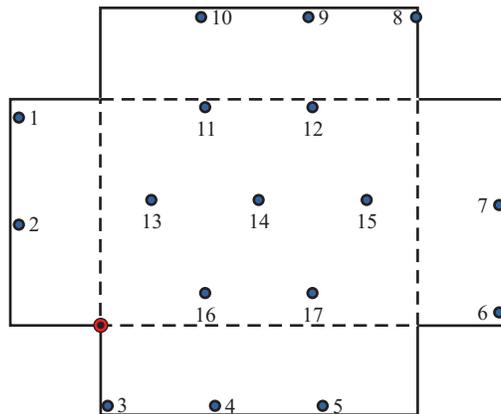
Drawing Not To Scale

Rev 2

Floor: 29.3 m²

Walls below 6 feet: 40.2 m²

Ceiling and walls above 6 feet: 179.3 m²



Class 2: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 21
Survey Unit 19 - 231A
Sample Points

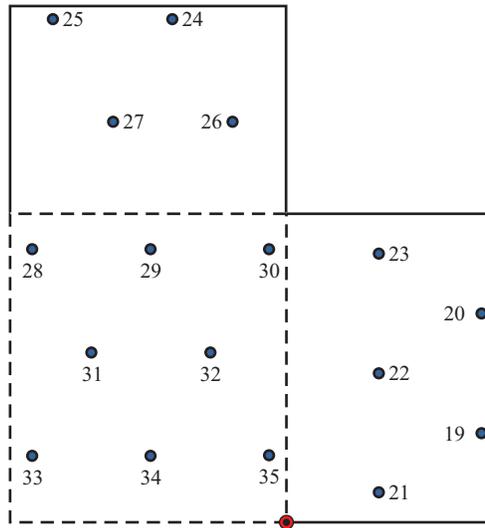
Drawing Not To Scale

Rev 1

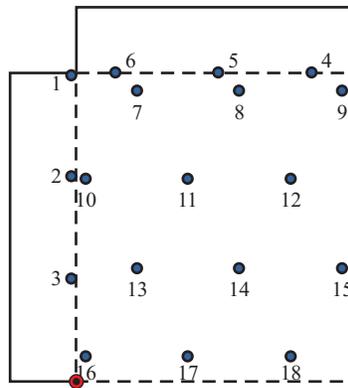
Floor: 65.0 m²

Walls below 6 feet: 29.67 m²

Ceiling and walls above 6 feet: 114.4 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 22
Survey Unit 20 - 228
Sample Points

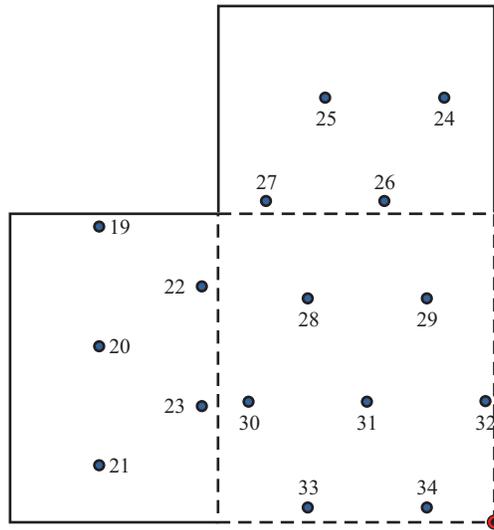
Drawing Not To Scale

Rev 1

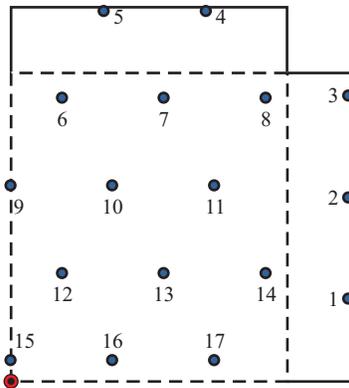
Floor: 65.0 m²

Walls below 6 feet: 29.67 m²

Ceiling and walls above 6 feet: 114.4 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 23
Survey Unit 21 - 228
Sample Points

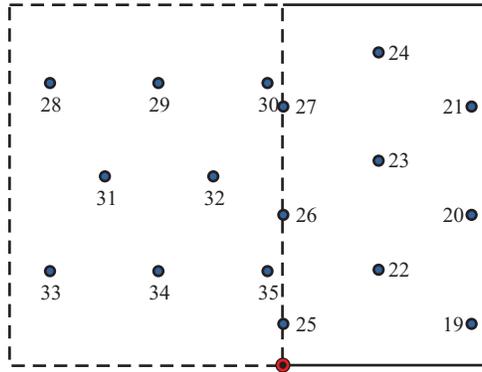
Drawing Not To Scale

Rev 1

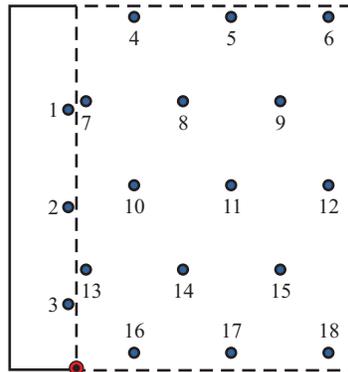
Floor: 76.7 m²

Walls below 6 feet: 18.5 m²

Ceiling and walls above 6 feet: 107.4 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 24
Survey Unit 22 - 228
Sample Points

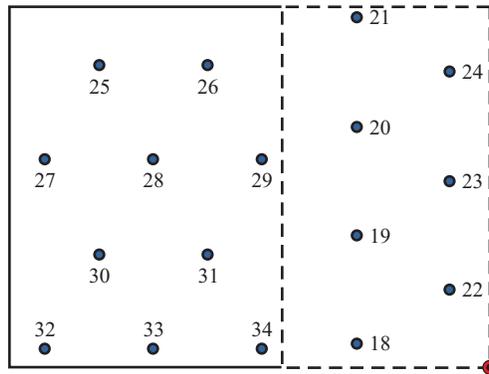
Drawing Not To Scale

Rev 1

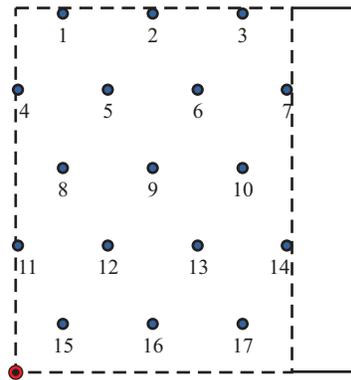
Floor: 76.7 m²

Walls below 6 feet: 18.5 m²

Ceiling and walls above 6 feet: 107.4 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 25
Survey Unit 23 - 228
Sample Points

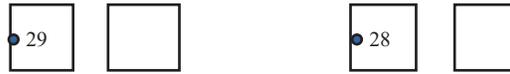
Drawing Not To Scale

Rev 1

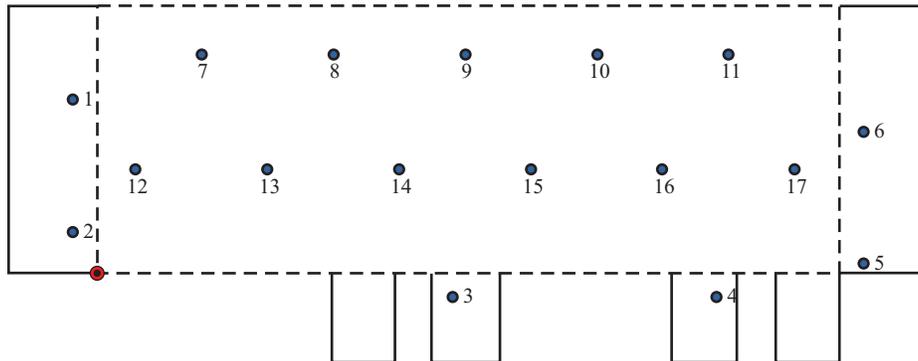
Floor: 50.2 m²

Walls below 6 feet: 10.11 m²

Ceiling and walls above 6 feet: 67.0 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 26
Survey Unit 24 - 228
Sample Points

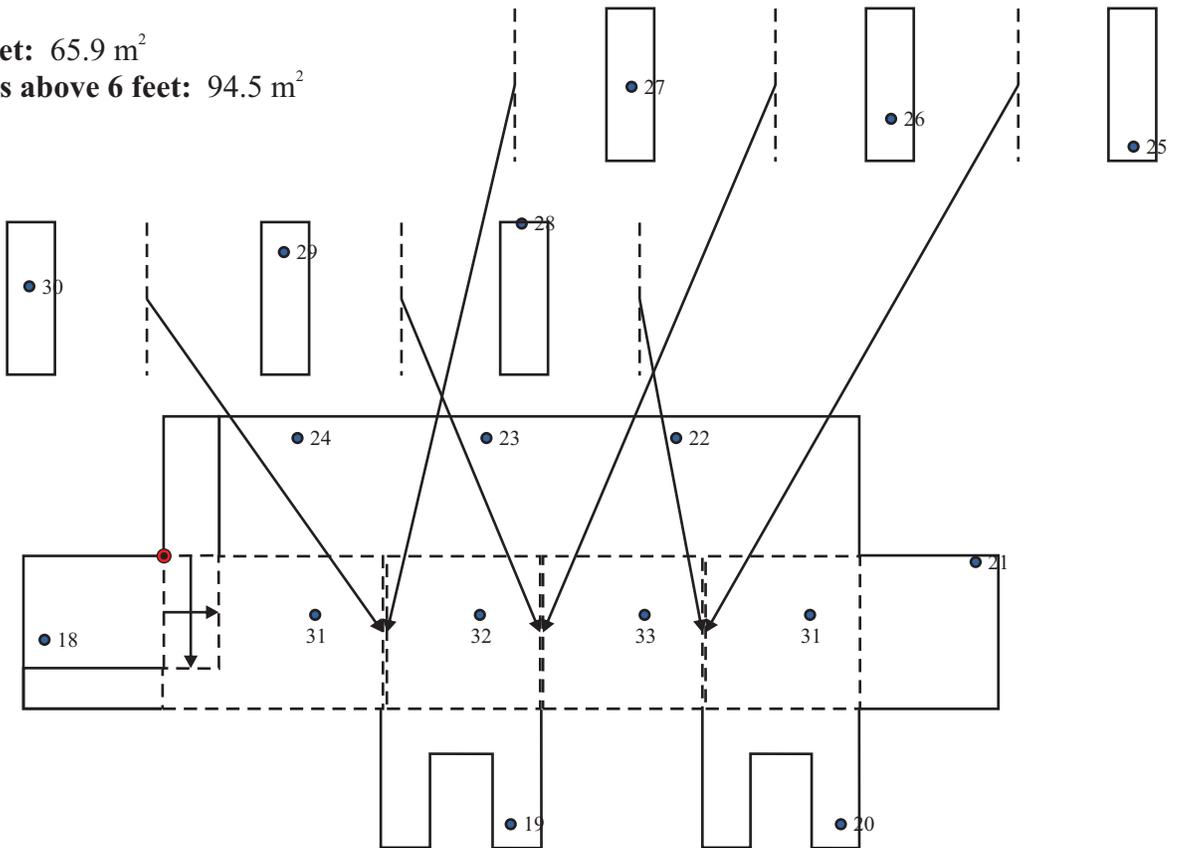
Drawing Not To Scale

Rev 1

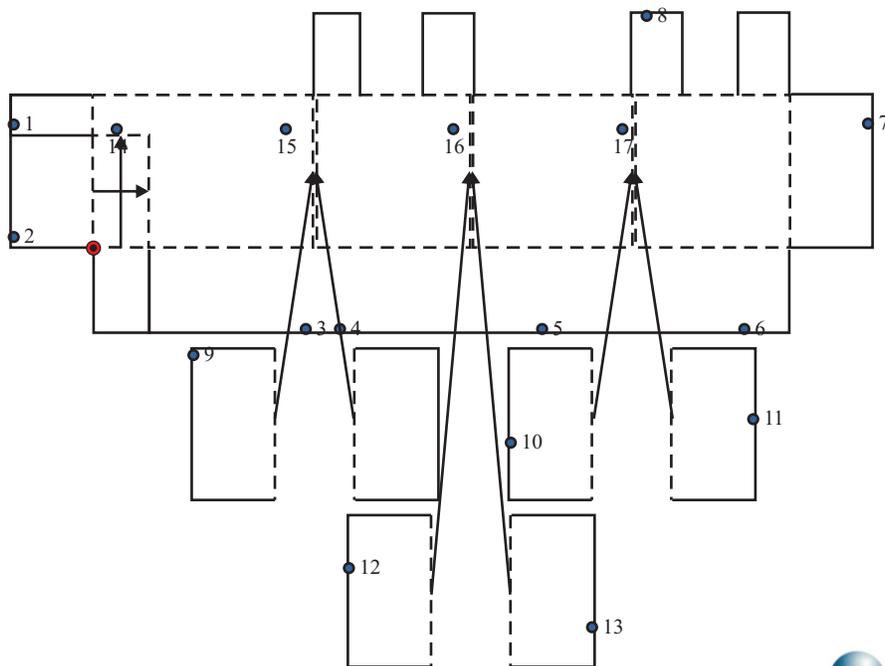
Floor: 27.7 m²

Walls below 6 feet: 65.9 m²

Ceiling and walls above 6 feet: 94.5 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

● Sample Point

● South West Corner Reference



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 27
Survey Unit 25 - 228
Sample Points

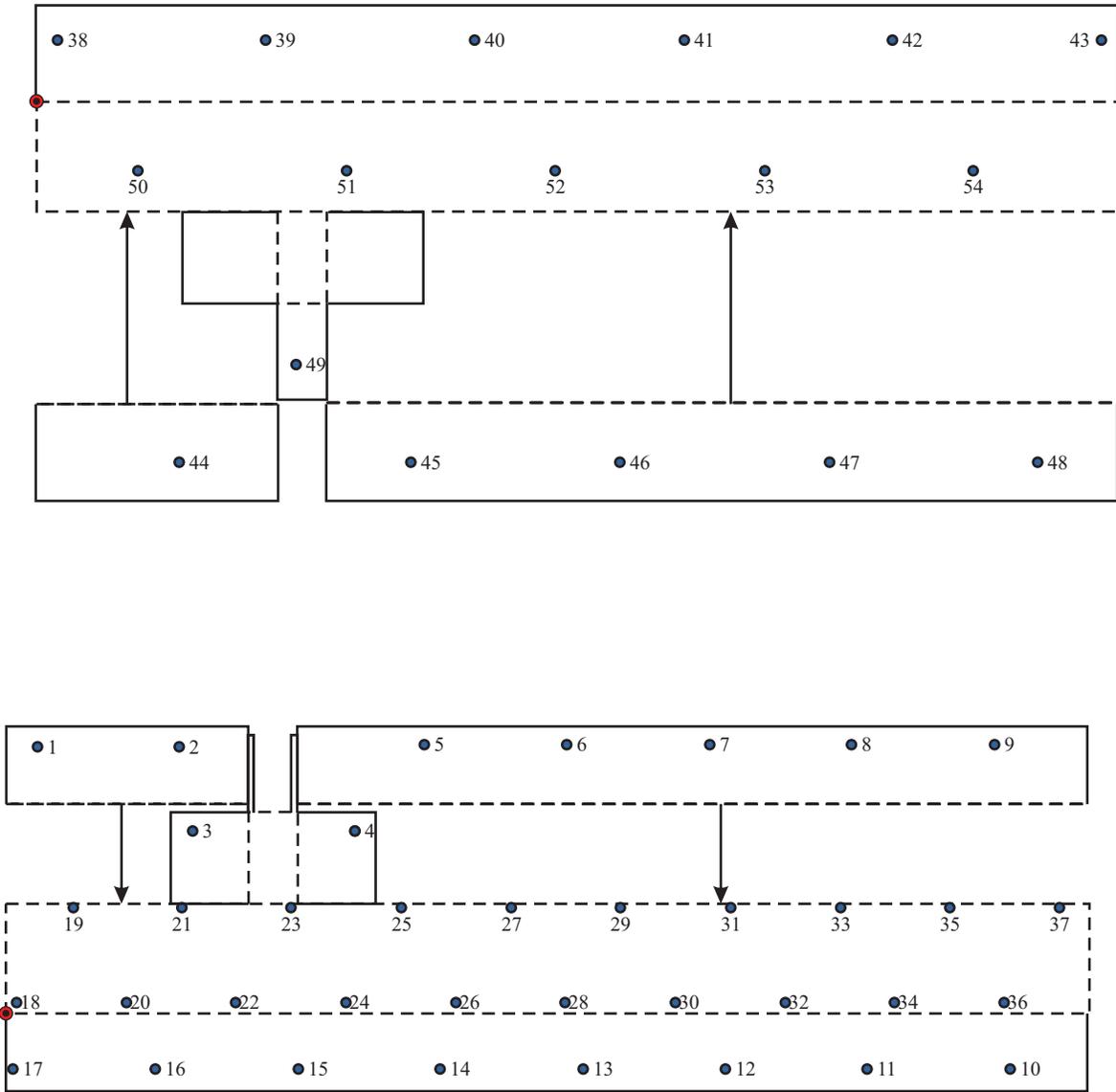
Drawing Not To Scale

Rev 1

Floor: 82.5 m²

Walls below 6 feet: 97.2 m²

Walls above 6 feet and ceilings: 367.1 m²



Class 1: Floor and Walls < 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

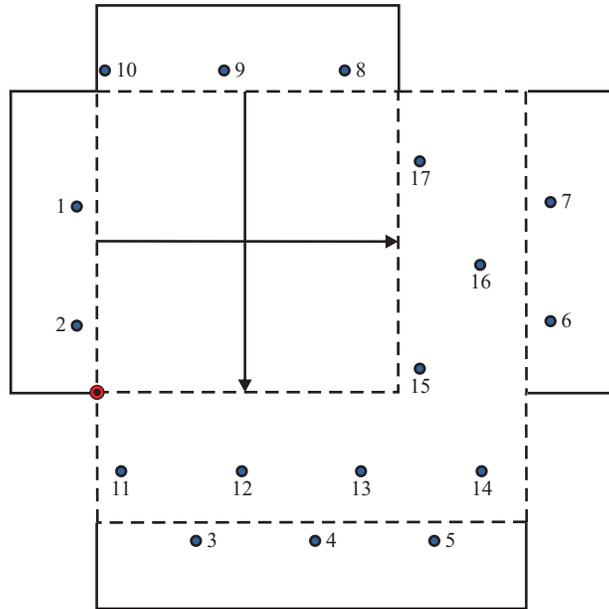
FIGURE 28
Survey Unit 26- Hallway
Sample Points

Drawing Not To Scale

Rev 2

Floor: 51.49 m²

Walls below 6 feet: 73.94 m²



Class 2: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 29
Survey Unit 27 - Buffer
Sample Points

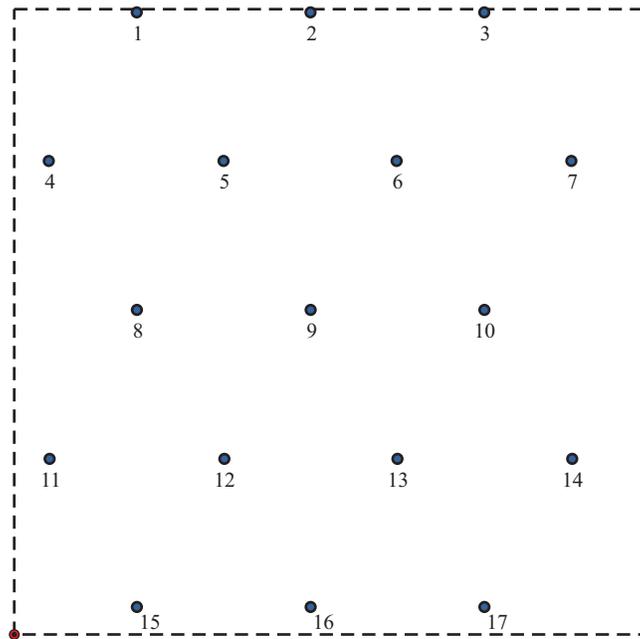
Drawing Not To Scale

Rev 2

Floor: 100 m²

Walls below 6 feet: 0 m²

Ceiling and walls above 6 feet: 0 m²



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 30
Survey Unit 28
Sample Points

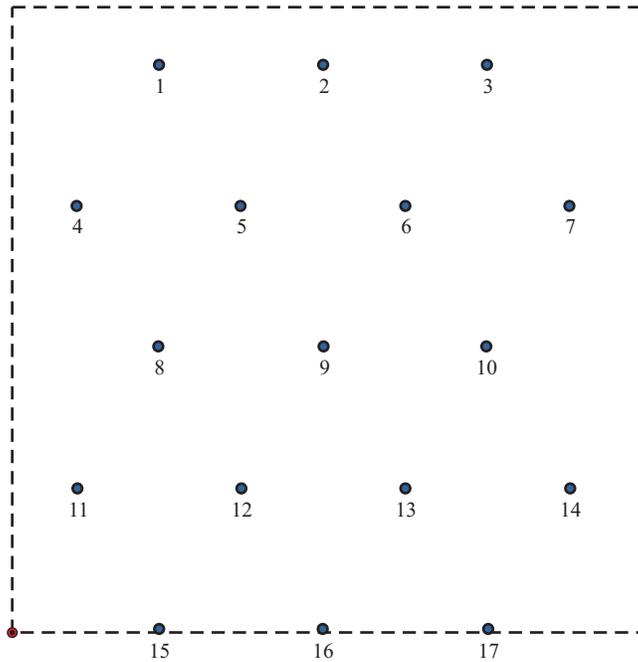
Drawing Not To Scale

Rev 1

Floor: 100 m²

Walls below 6 feet: 0 m²

Ceiling and walls above 6 feet: 0 m²



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 31
Survey Unit 29
Sample Points

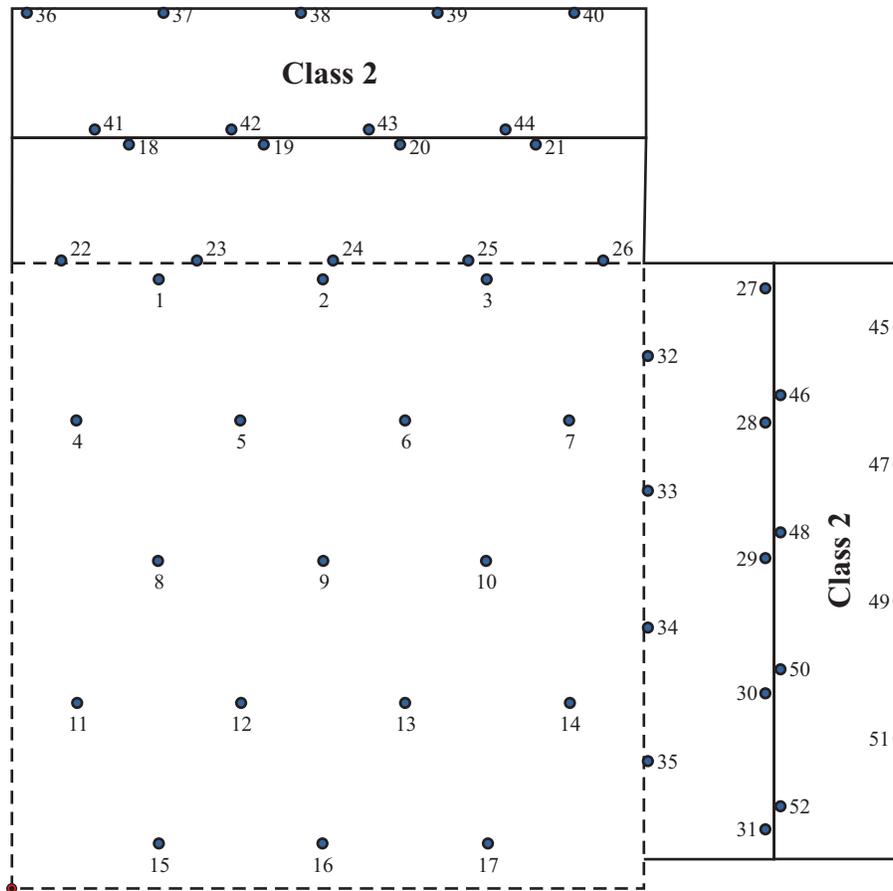
Drawing Not To Scale

Rev 1

Floor: 100 m²

Walls below 6 feet: 38.4 m²

Ceiling and walls above 6 feet: 38.4 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and <12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 32
Survey Unit 30
Sample Points

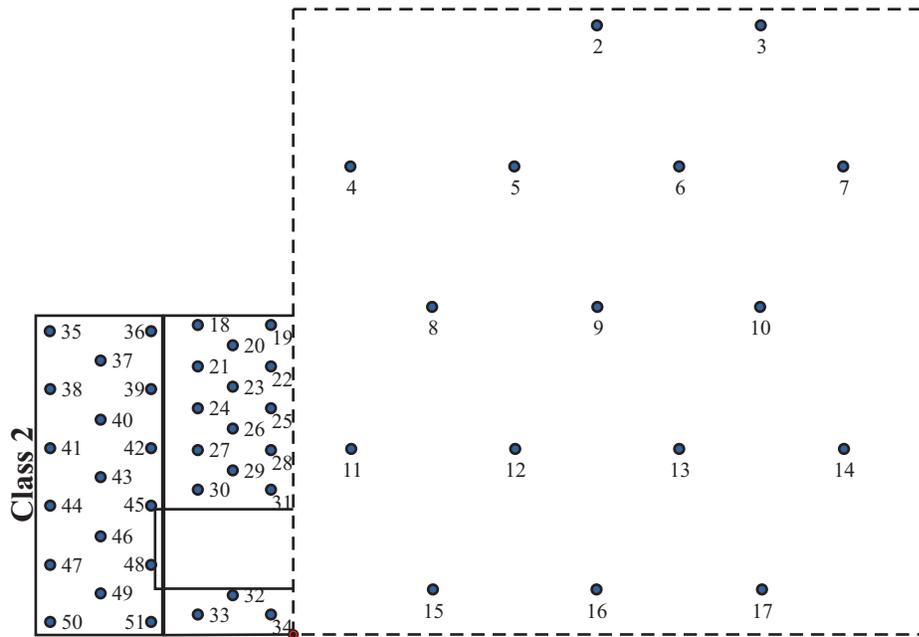
Drawing Not To Scale

Rev 1

Floor: 100 m²

Walls below 6 feet: 8.1 m²

Ceiling and walls above 6 feet: 8.1 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and <12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 33
Survey Unit 31
Sample Points

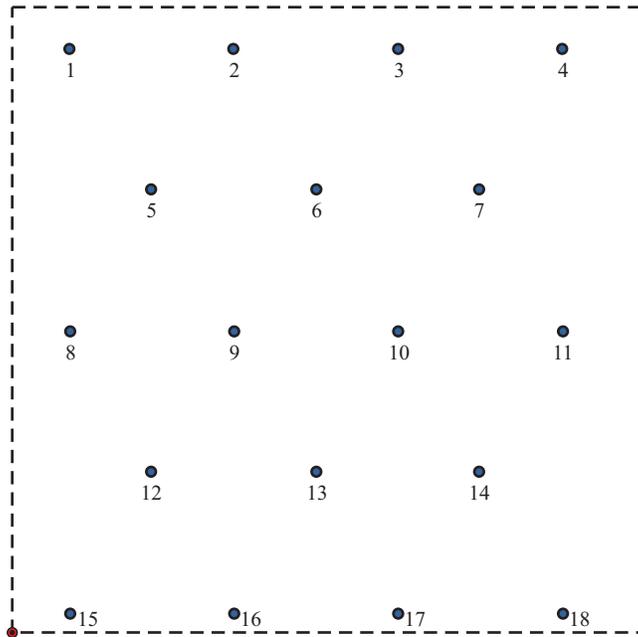
Drawing Not To Scale

Rev 1

Floor: 100 m²

Walls below 6 feet: 8.1 m²

Ceiling and walls above 6 feet: 8.1 m²



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 34
Survey Unit 32
Sample Points

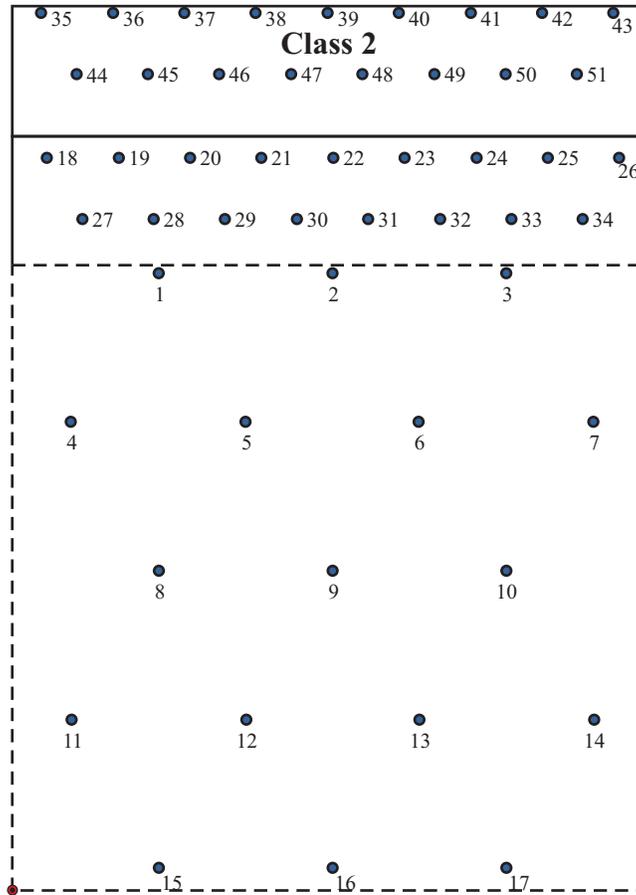
Drawing Not To Scale

Rev 1

Floor: 100 m²

Walls below 6 feet: 20 m²

Ceiling and walls above 6 feet: 20 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and < 12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 35
Survey Unit 33
Sample Points

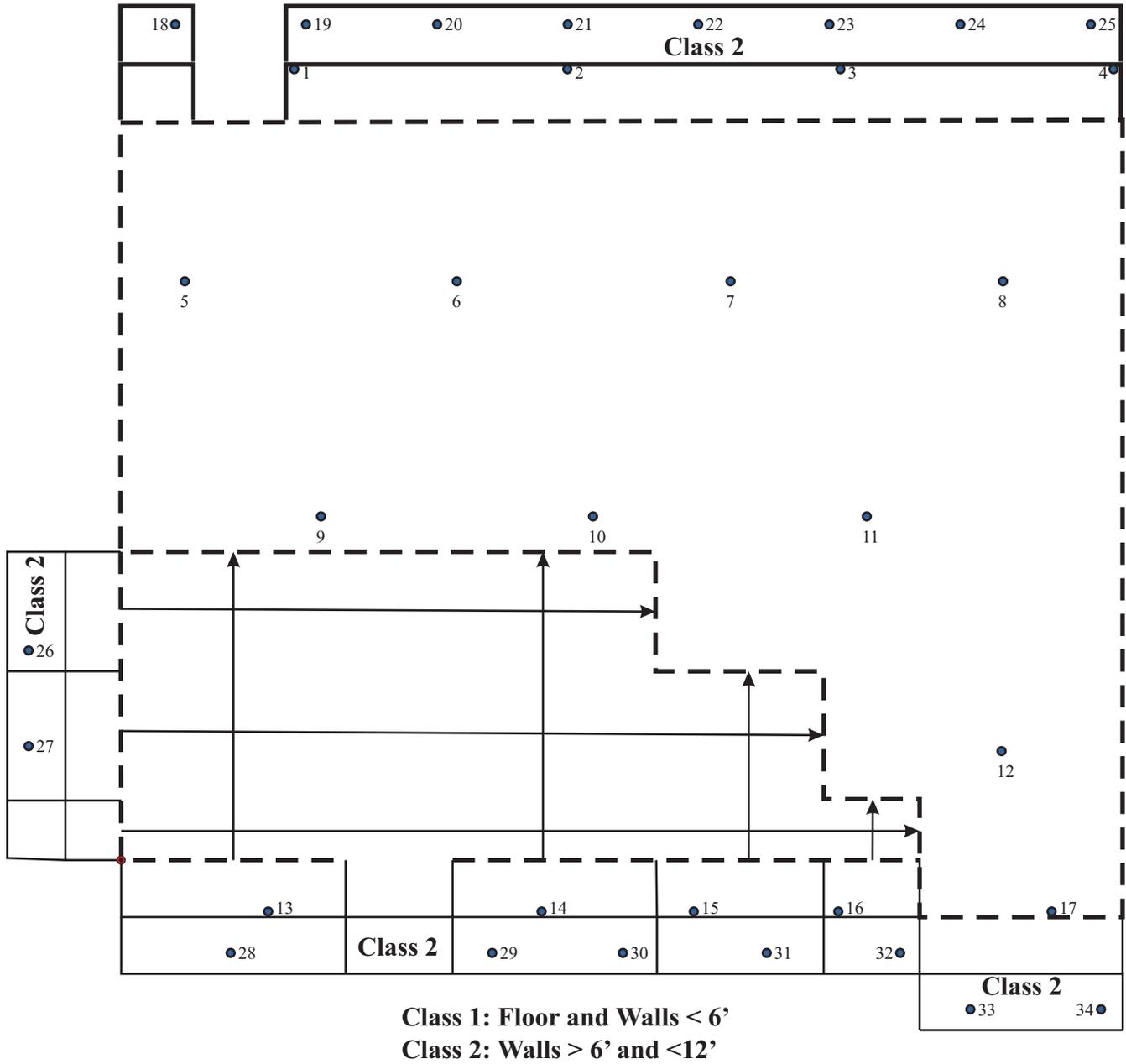
Drawing Not To Scale

Rev 1

Floor: 684.5 m²

Walls below 6 feet: 149 m²

Ceiling and walls above 6 feet: 149 m²



● Sample Point

● South West Corner Reference



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 36
Survey Unit 34
Sample Points

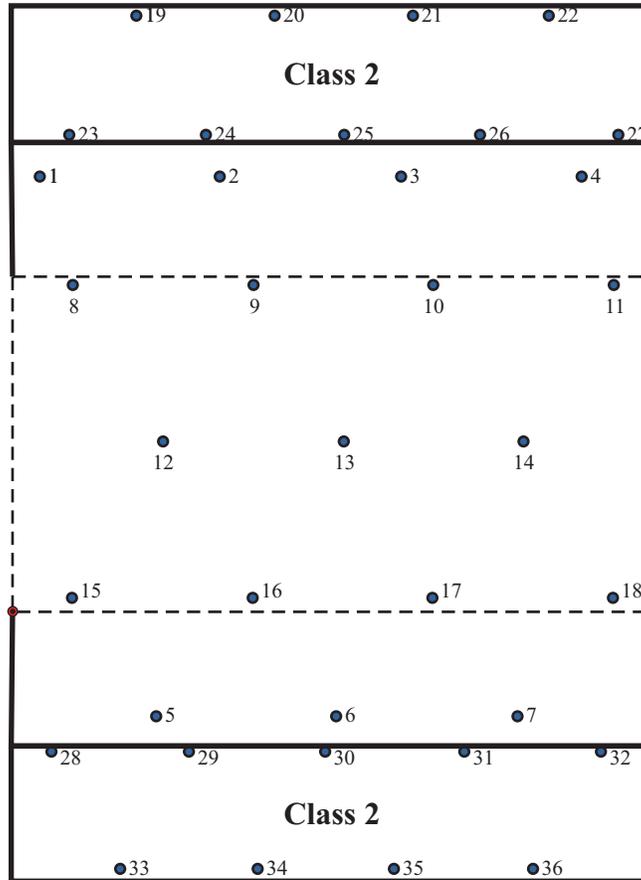
Drawing Not To Scale

Rev 1

Floor: 47.5 m²

Walls below 6 feet: 38 m²

Ceiling and walls above 6 feet: 38 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and <12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 37
Survey Unit 35
Sample Points

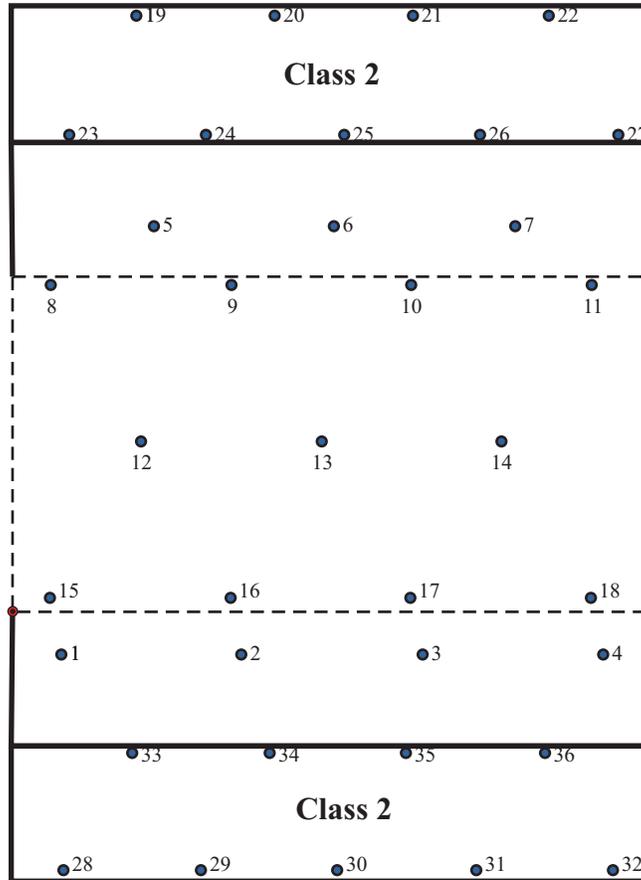
Drawing Not To Scale

Rev 1

Floor: 684.5 m²

Walls below 6 feet: 149 m²

Ceiling and walls above 6 feet: 149 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and <12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 38
Survey Unit 36
Sample Points

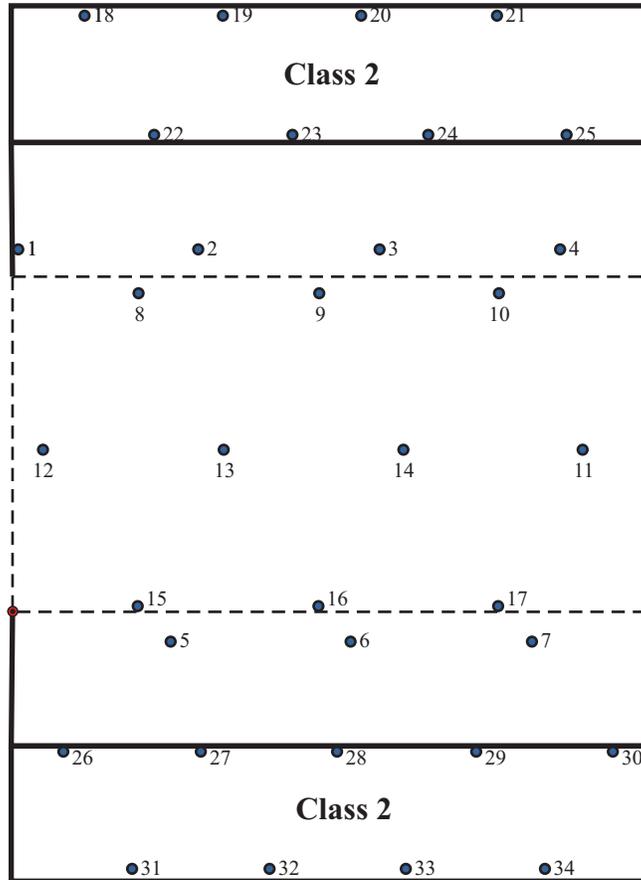
Drawing Not To Scale

Rev 1

Floor: 47.5 m²

Walls below 6 feet: 38 m²

Ceiling and walls above 6 feet: 38 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and <12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 39
Survey Unit 37
Sample Points

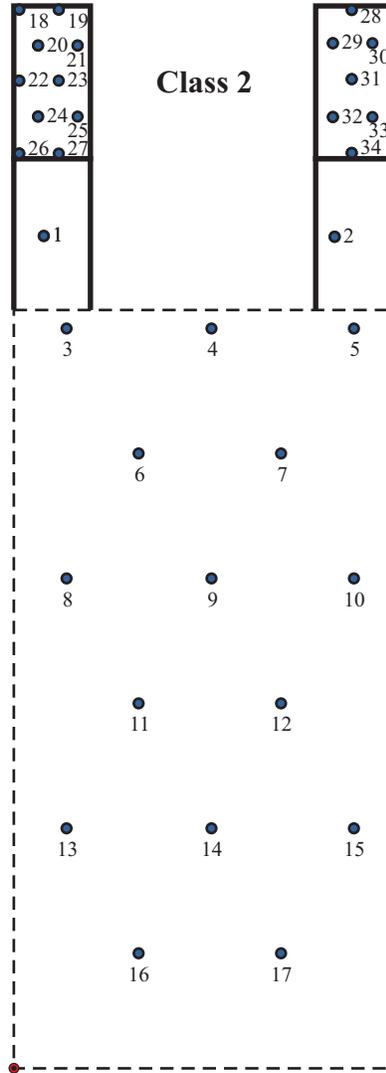
Drawing Not To Scale

Rev 1

Floor: 50 m²

Walls below 6 feet: 4 m²

Ceiling and walls above 6 feet: 4 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and <12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 40
Survey Unit 38
Sample Points

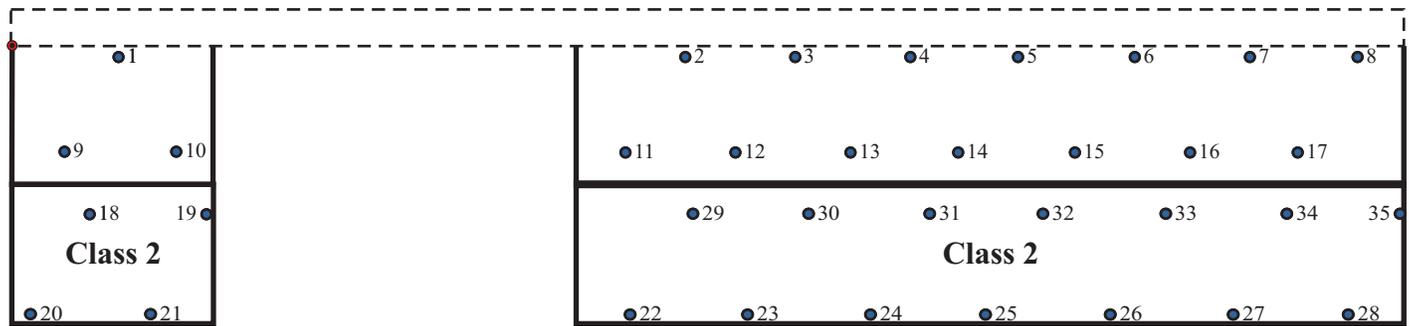
Drawing Not To Scale

Rev 1

Floor: 10 m²

Walls below 6 feet: 29.6 m²

Ceiling and walls above 6 feet: 29.6 m²



Class 1: Floor and Walls < 6'

Class 2: Walls > 6' and <12'

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

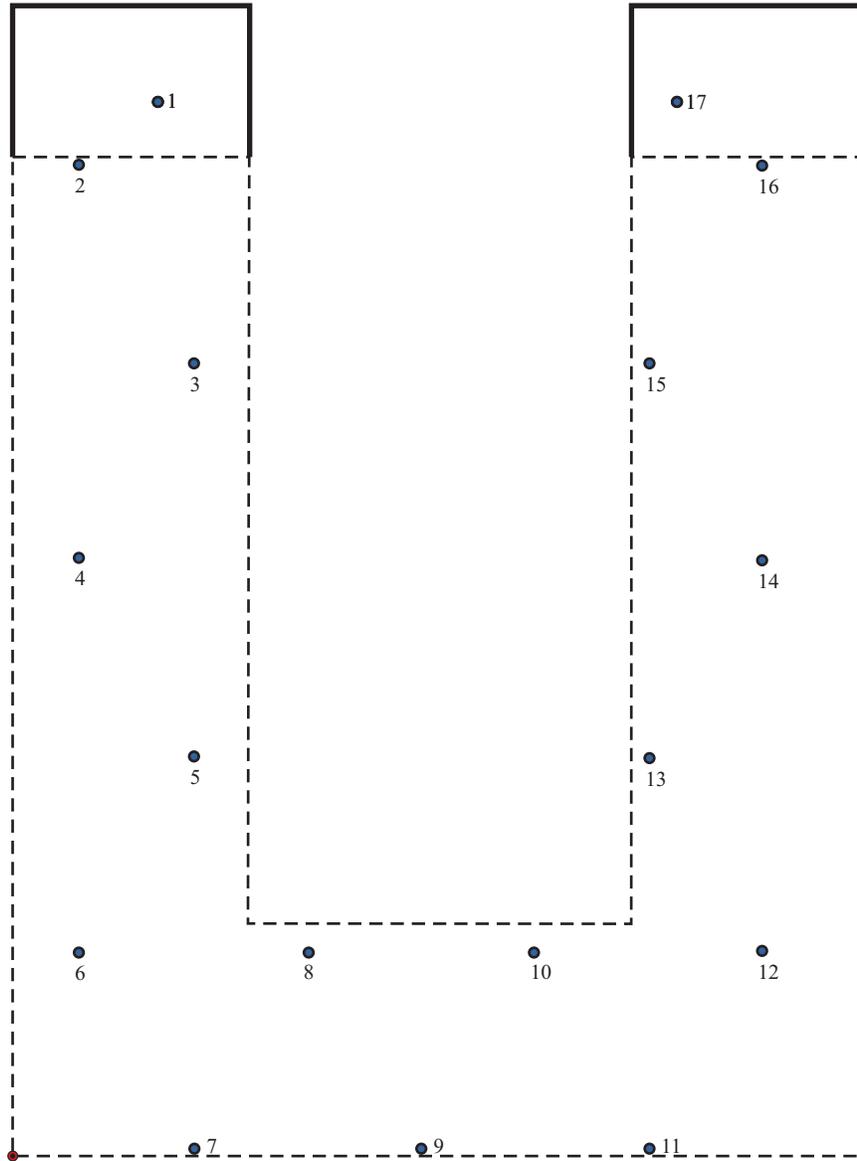
FIGURE 41
Survey Unit 39
Sample Points

Drawing Not To Scale

Rev 1

Floor: 95.5 m²

Walls below 6 feet: 10.2 m²



Class 2: Floor and Walls < 6'



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 42
Survey Unit 40
Sample Points

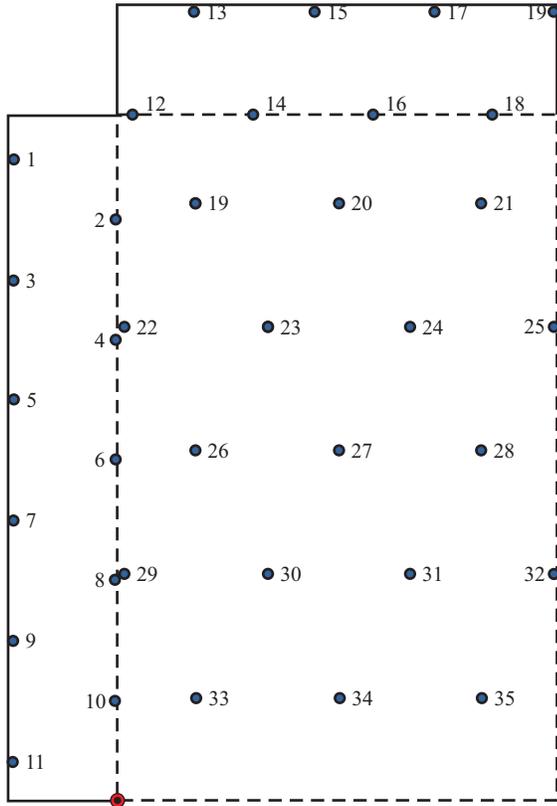
Drawing Not To Scale

Rev 1

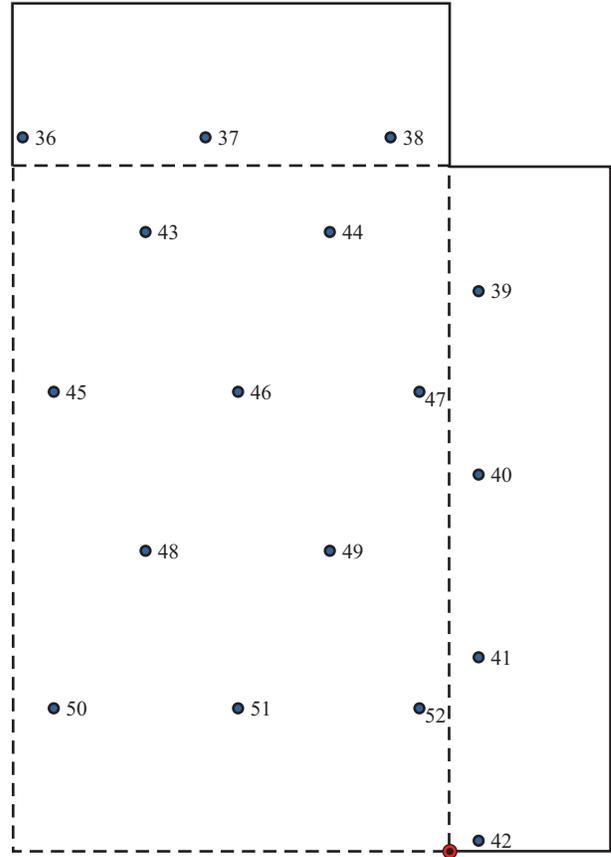
Floor: 100 m²

Walls below 6 feet: 40.4 m²

Ceiling and walls above 6 feet: 161.6 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 43
Survey Unit 41
Sample Points

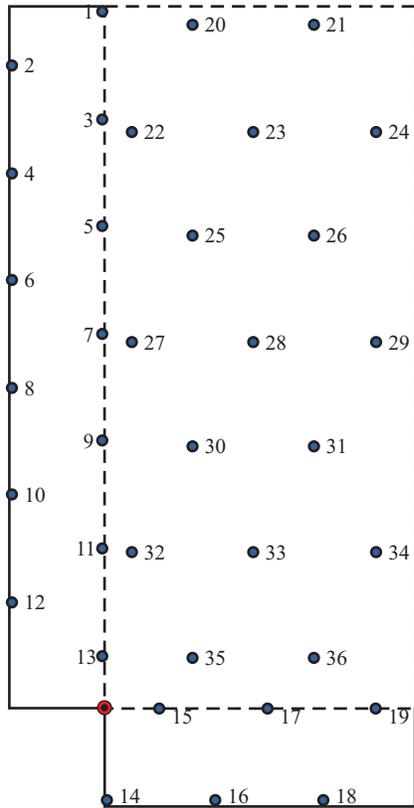
Drawing Not To Scale

Rev 1

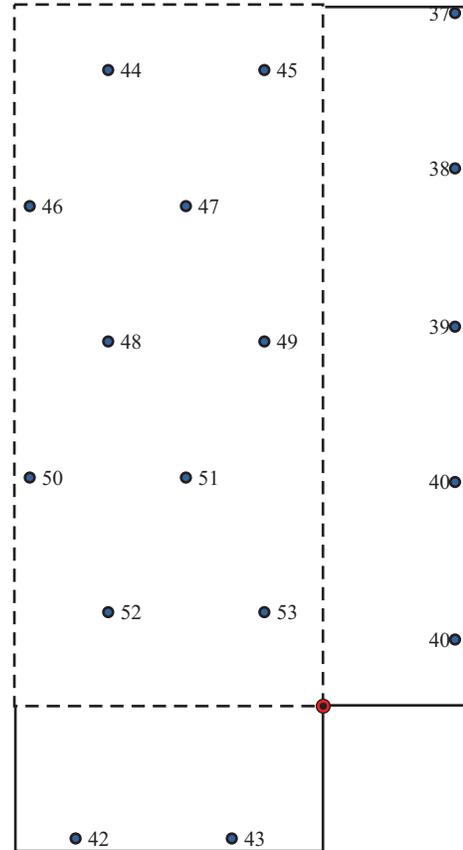
Floor: 93.7 m²

Walls below 6 feet: 41.3 m²

Ceiling and walls above 6 feet: 156.7 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 44
Survey Unit 42
Sample Points

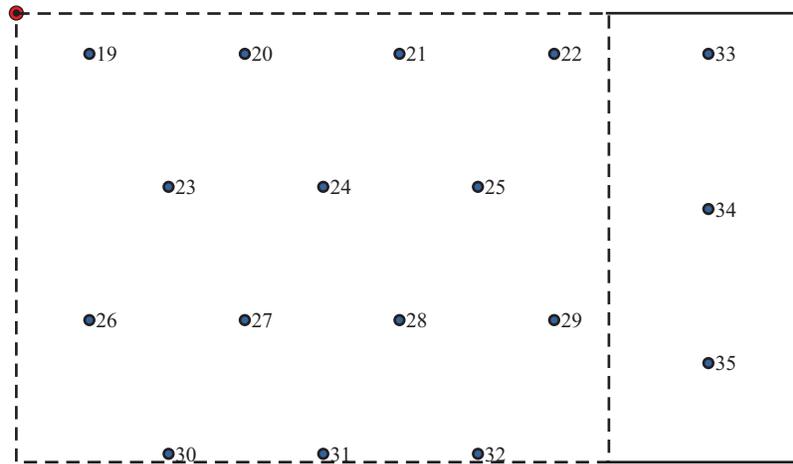
Drawing Not To Scale

Rev 1

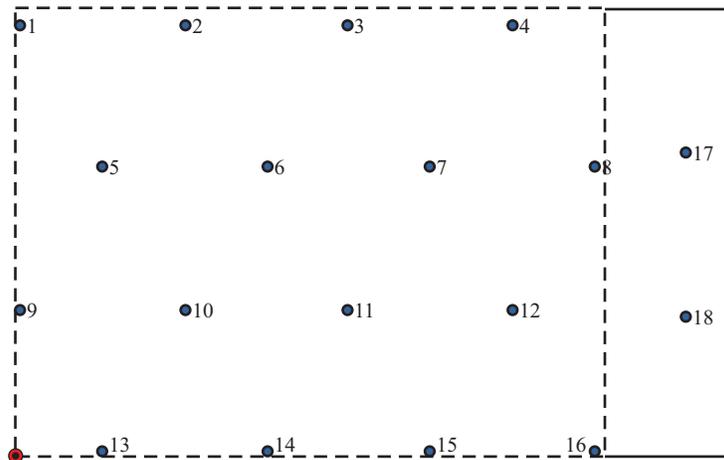
Floor: 63.9 m²

Walls below 6 feet: 13.1 m²

Ceiling and walls above 6 feet: 109.3 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 Sample Point

 South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 45
Survey Unit 43
Sample Points

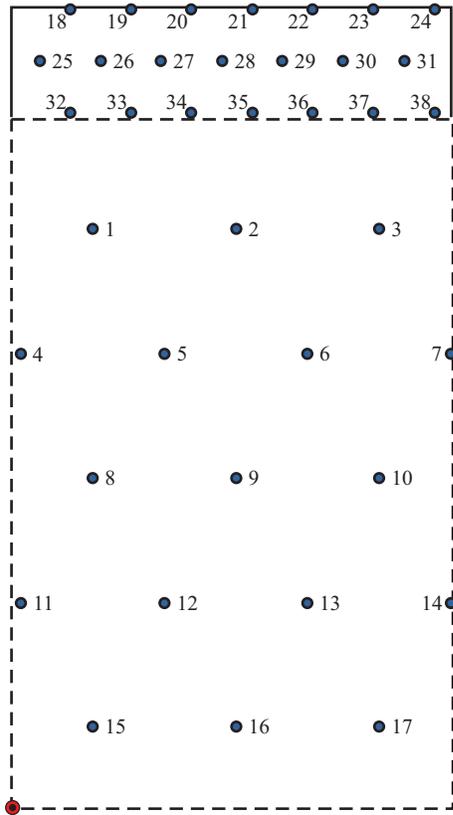
Drawing Not To Scale

Rev 1

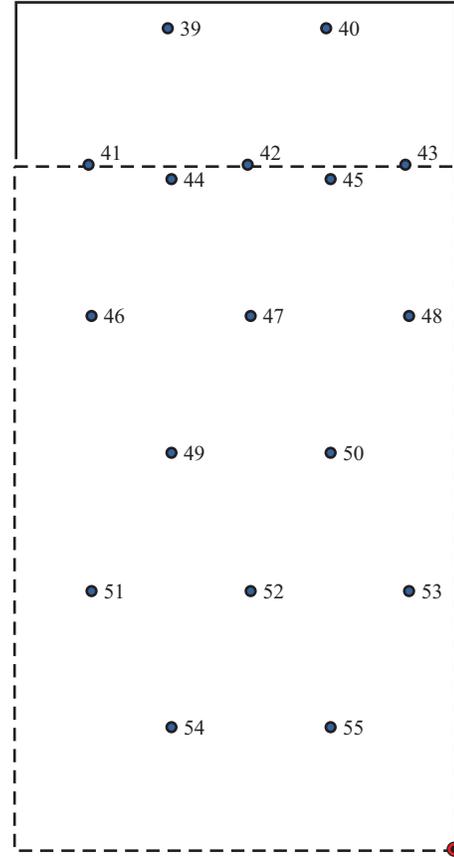
Floor: 100.0 m²

Walls below 6 feet: 14.9 m²

Ceiling and walls above 6 feet: 124.0 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 46
Survey Unit 44
Sample Points

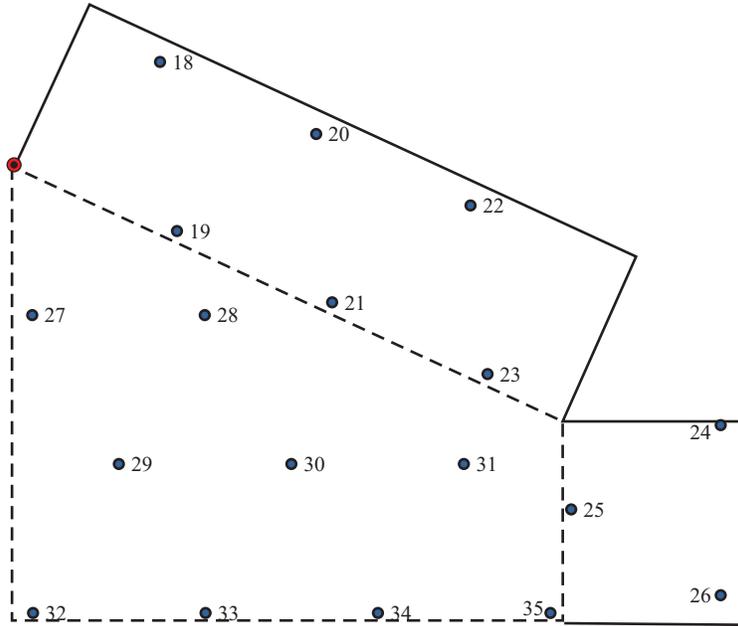
Drawing Not To Scale

Rev 1

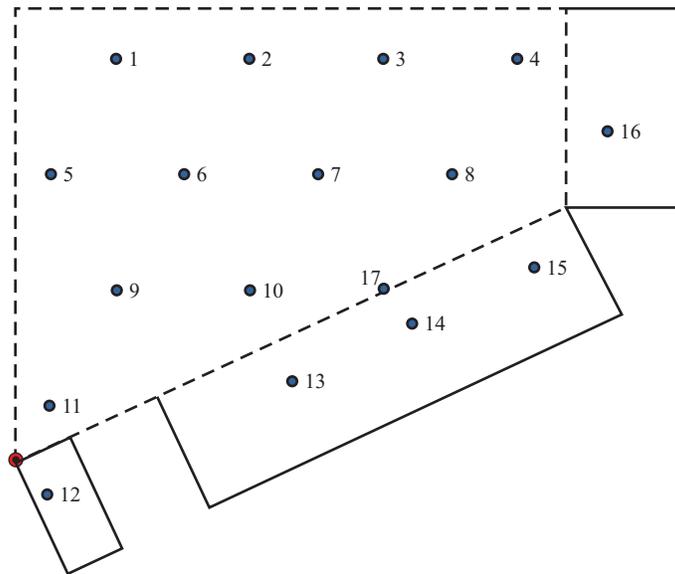
Floor: 50.2 m²

Walls below 6 feet: 23.2 m²

Ceiling and walls above 6 feet: 124.0 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 Sample Point

 South West Corner Reference



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 47
Survey Unit 45
Sample Points

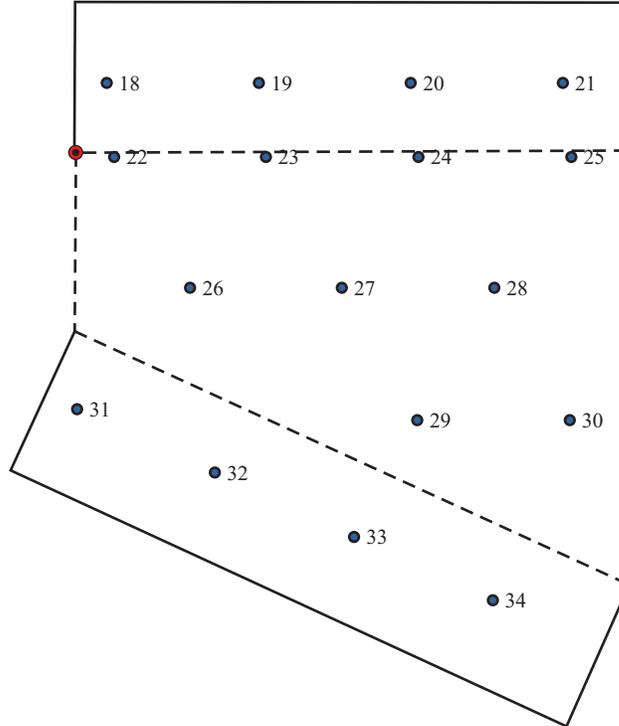
Drawing Not To Scale

Rev 1

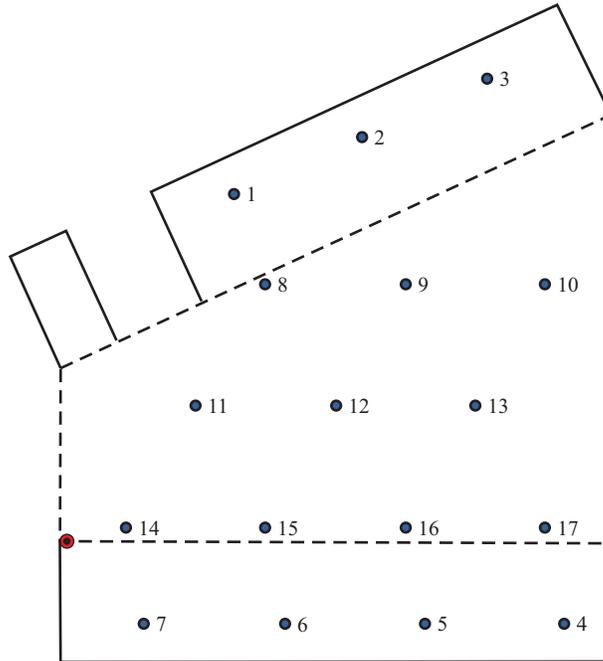
Floor: 45.7 m²

Walls below 6 feet: 34.8 m²

Ceiling and walls above 6 feet: 95.1 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 48
Survey Unit 46
Sample Points

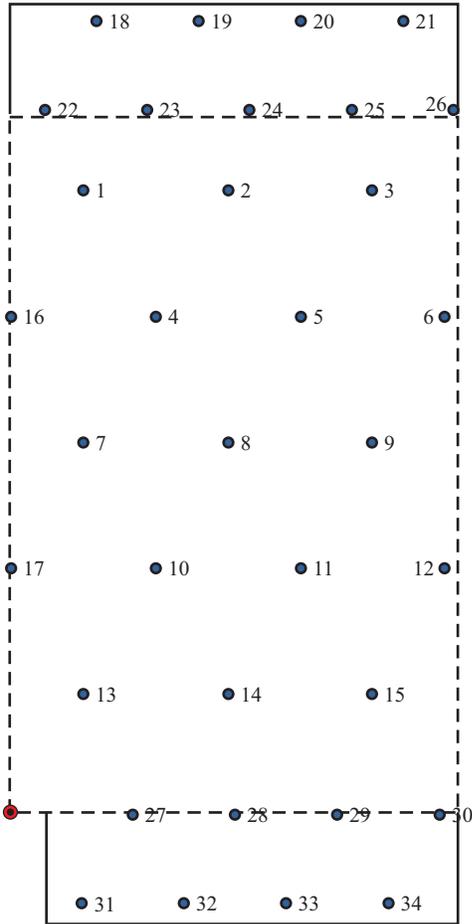
Drawing Not To Scale

Rev 1

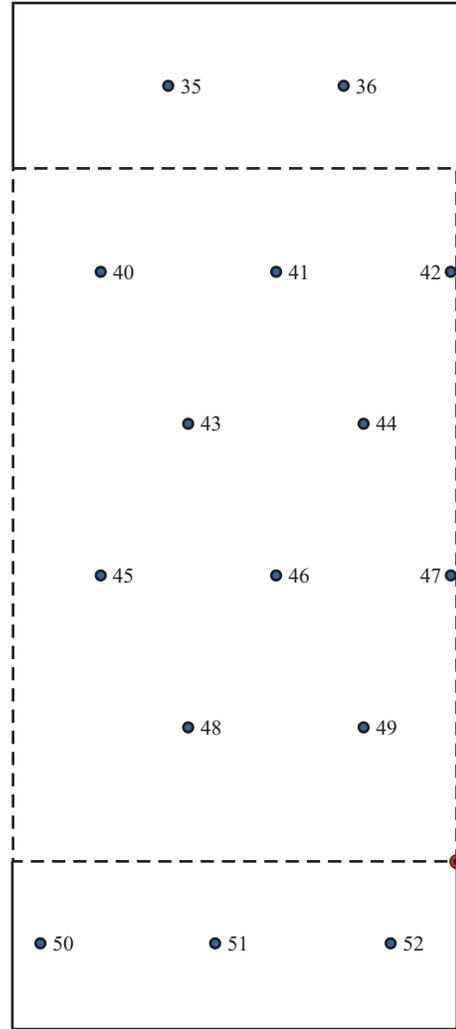
Floor: 100.0 m²

Walls below 6 feet: 29.9 m²

Ceiling and walls above 6 feet: 146.7 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 49
Survey Unit 47
Sample Points

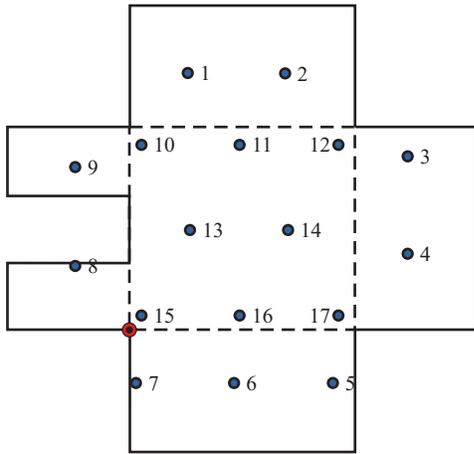
Drawing Not To Scale

Rev 1

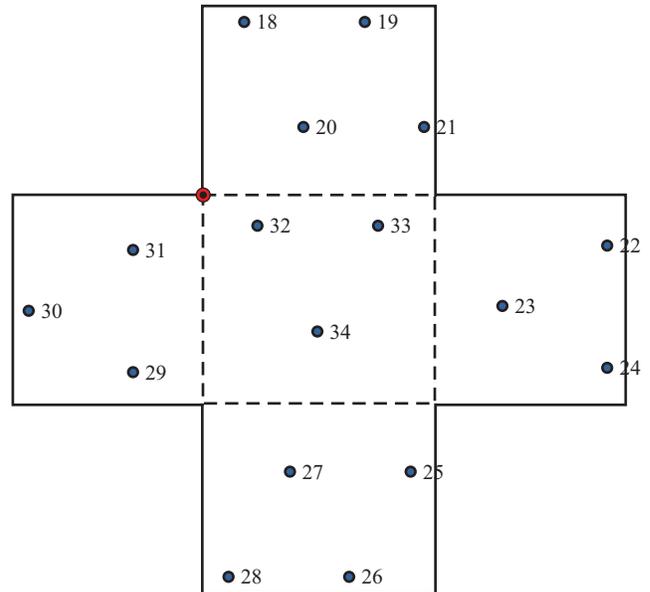
Floor: 12.3 m²

Walls below 6 feet: 25.9 m²

Ceiling and walls above 6 feet: 54.7 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 50
Survey Unit 48
Sample Points

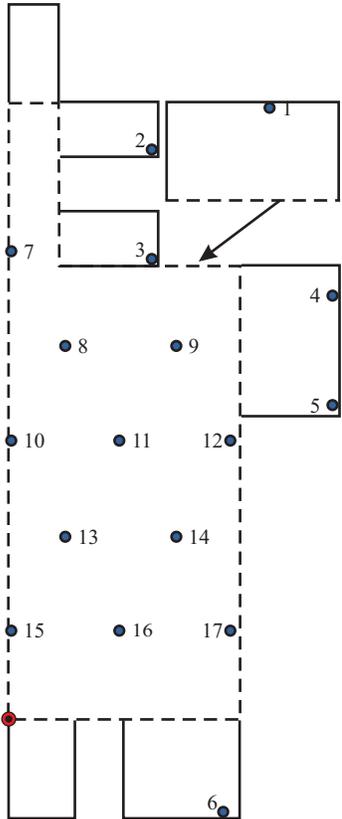
Drawing Not To Scale

Rev 1

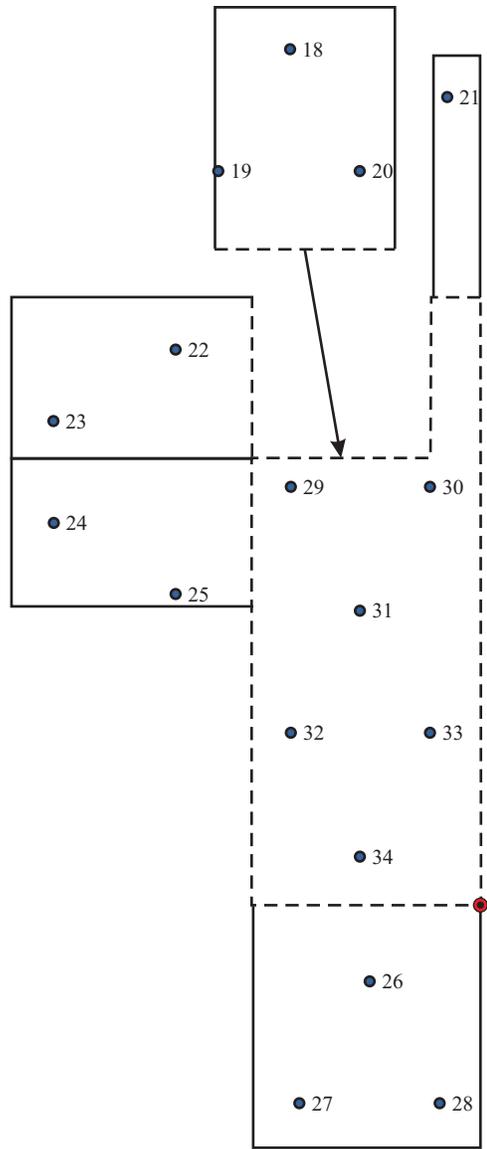
Floor: 46.3 m²

Walls below 6 feet: 26.4 m²

Ceiling and walls above 6 feet: 176.3 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 51
Survey Unit 49
Sample Points

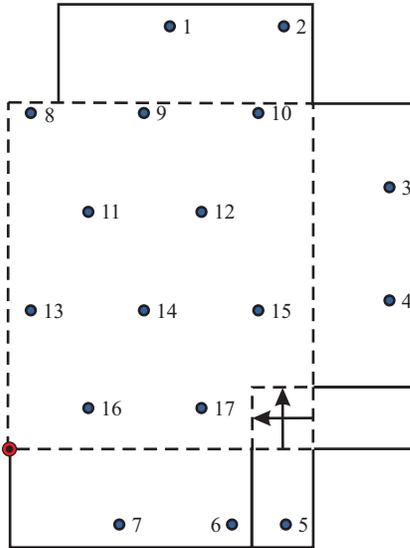
Drawing Not To Scale

Rev 1

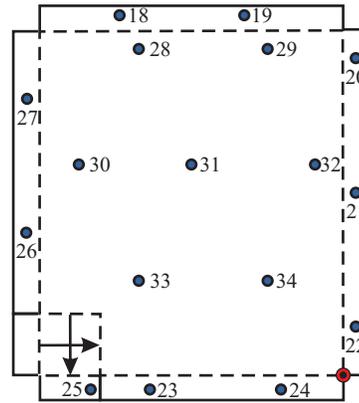
Floor: 41.2 m²

Walls below 6 feet: 36.1 m²

Ceiling and walls above 6 feet: 40.1 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 52
Survey Unit 50
Sample Points

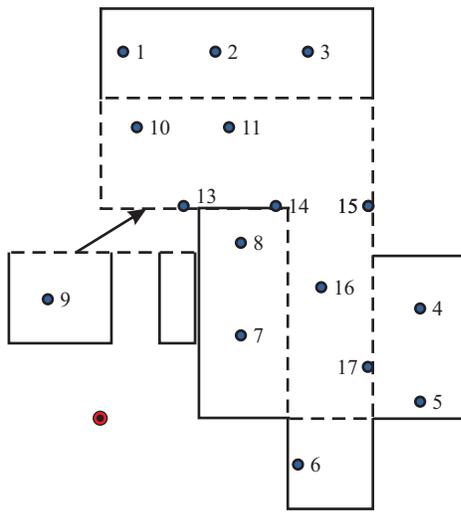
Drawing Not To Scale

Rev 1

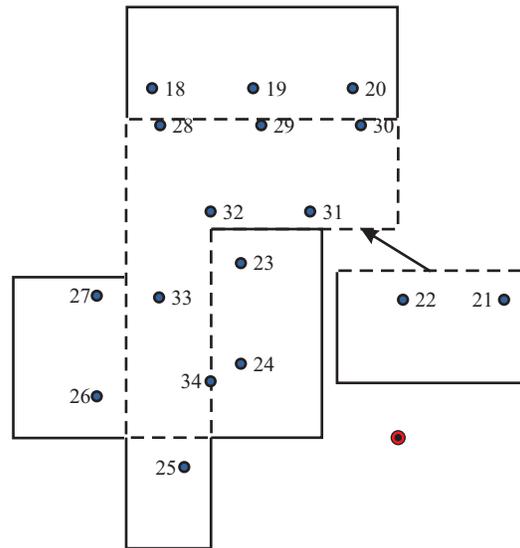
Floor: 24.0 m²

Walls below 6 feet: 38.8 m²

Ceiling and walls above 6 feet: 76.1 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 54
Survey Unit 52
Sample Points

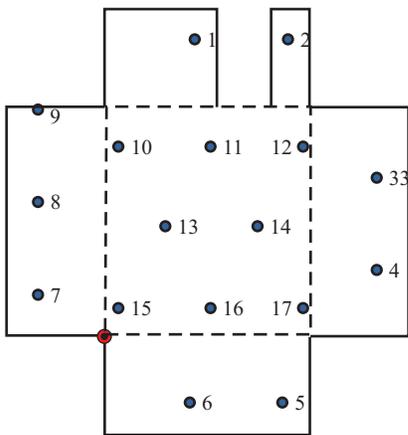
Drawing Not To Scale

Rev 1

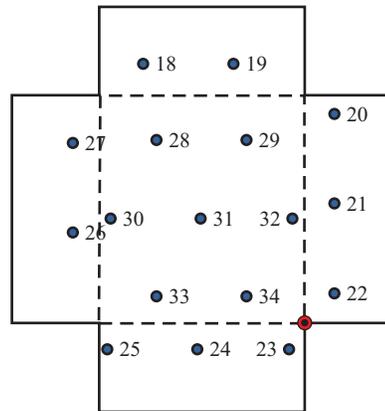
Floor: 19.6 m²

Walls below 6 feet: 33.2 m²

Ceiling and walls above 6 feet: 51.4 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 55
Survey Unit 53
Sample Points

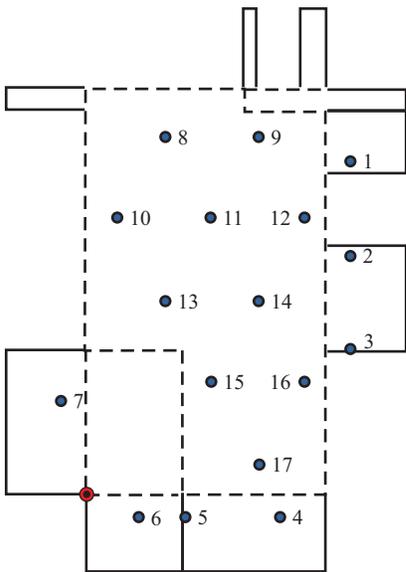
Drawing Not To Scale

Rev 1

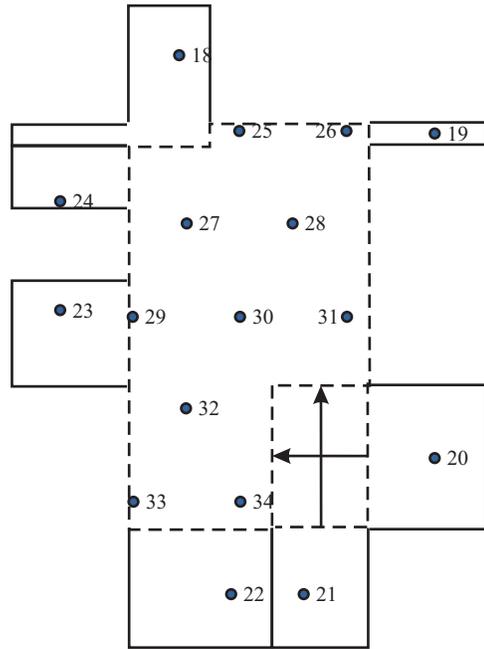
Floor: 52.5 m²

Walls below 6 feet: 32.0 m²

Ceiling and walls above 6 feet: 109.5 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 56
Survey Unit 54
Sample Points

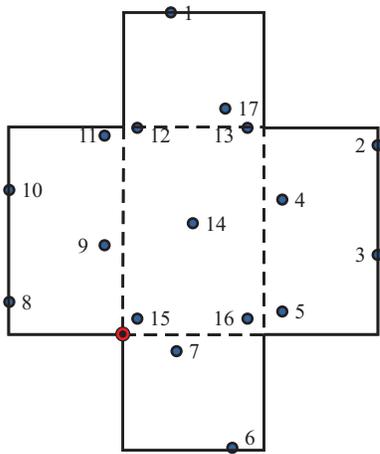
Drawing Not To Scale

Rev 1

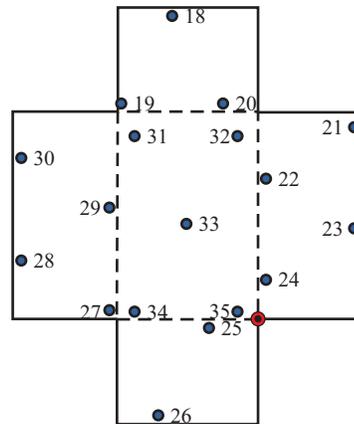
Floor: 8.8 m²

Walls below 6 feet: 24.2 m²

Ceiling and walls above 6 feet: 30.5 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 57
Survey Unit 55
Sample Points

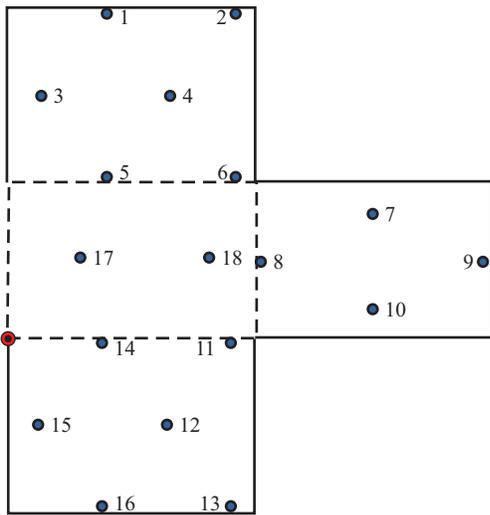
Drawing Not To Scale

Rev 1

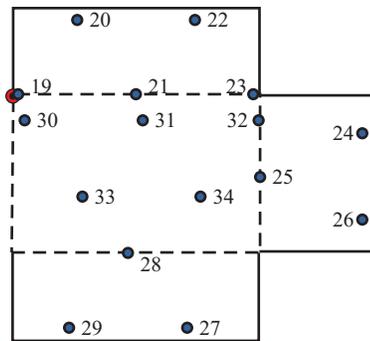
Floor: 15.1 m²

Walls below 6 feet: 47.9 m²

Ceiling and walls above 6 feet: 31.8 m²



Class 1: Floor and Walls < 6 Feet



Class 2: Ceiling and Walls > 6 Feet



Sample Point



South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 58
Survey Unit 56
Sample Points

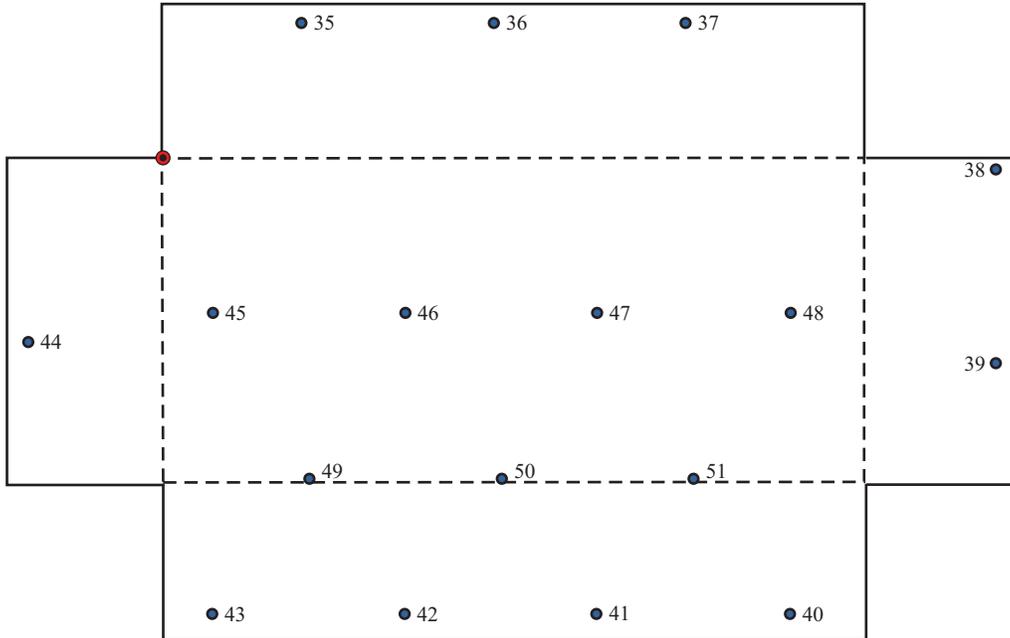
Drawing Not To Scale

Rev 1

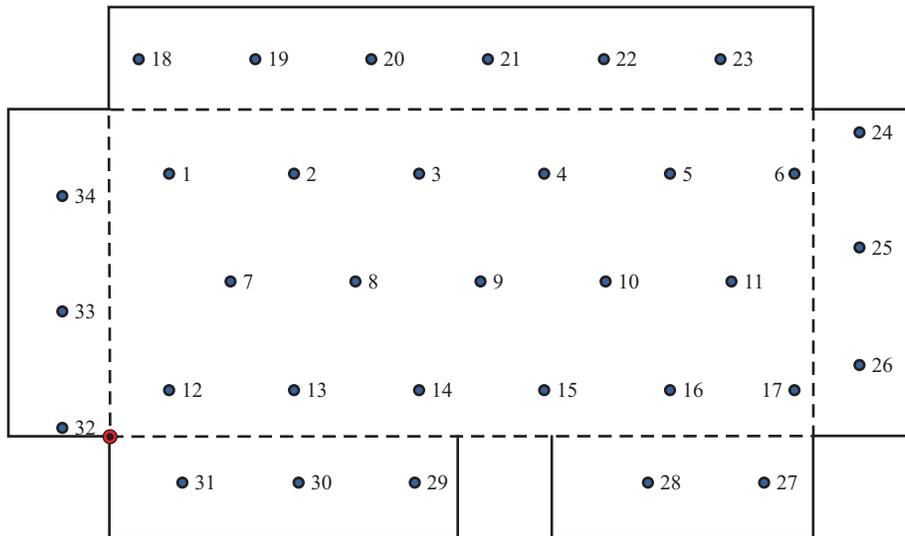
Floor: 88.6 m²

Walls below 6 feet: 77.2 m²

Ceiling and walls above 6 feet: 117.6 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 59
Survey Unit 57
Sample Points

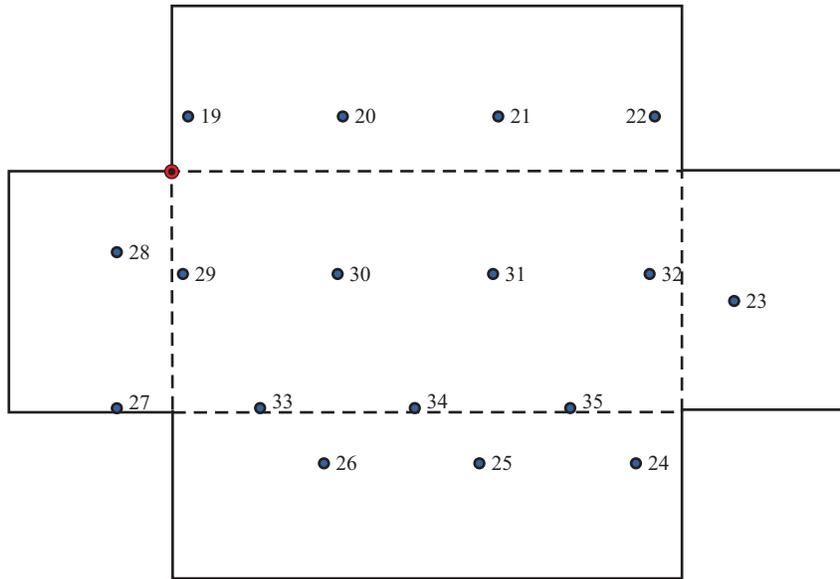
Drawing Not To Scale

Rev 1

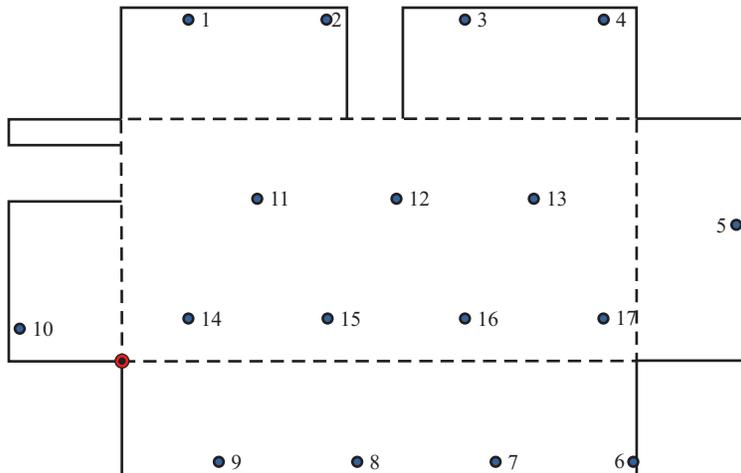
Floor: 39.7 m²

Walls below 6 feet: 50.0 m²

Ceiling and walls above 6 feet: 116.8 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 **Sample Point**

 **South West Corner Reference**



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

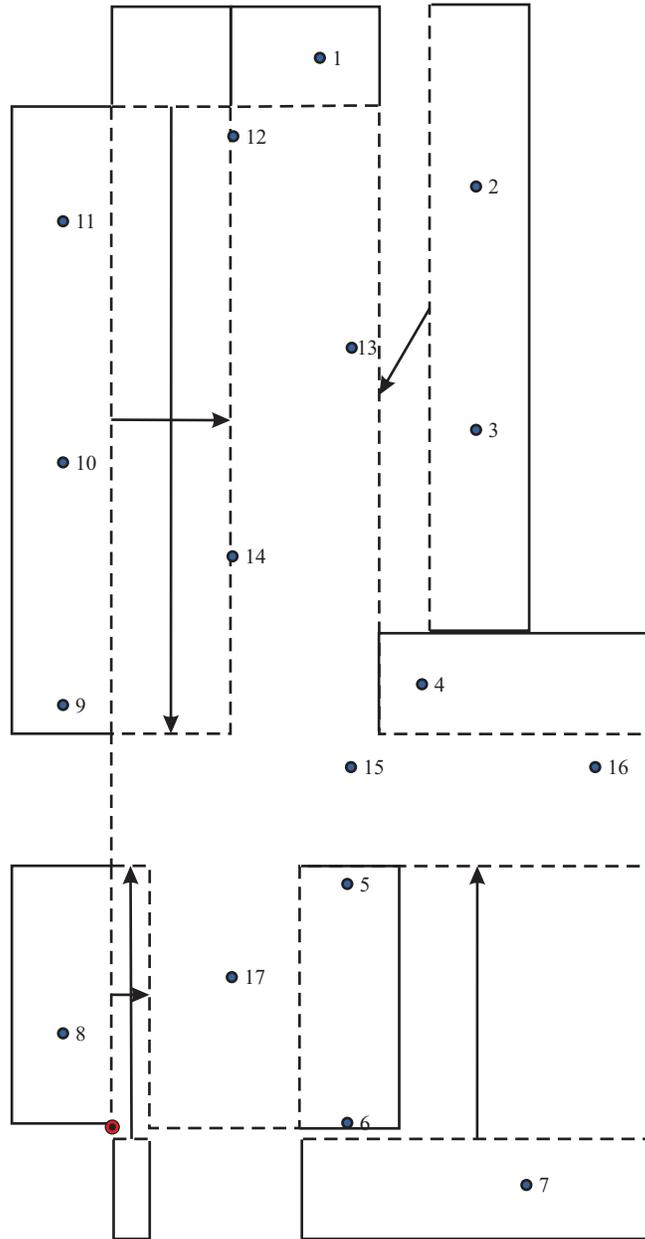
FIGURE 60
Survey Unit 58
Sample Points

Drawing Not To Scale

Rev 1

Floor: 82.12 m²

Walls below 6 feet: 113.4 m²



Class 2: Floor and Walls < 6 Feet

● Sample Point

● South West Corner Reference



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 61
Survey Unit 59
Sample Points

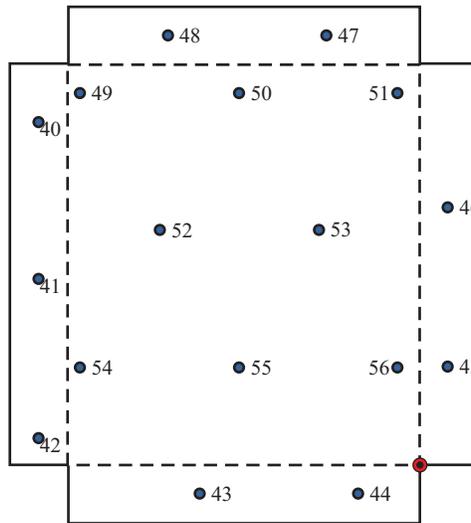
Drawing Not To Scale

Rev 1

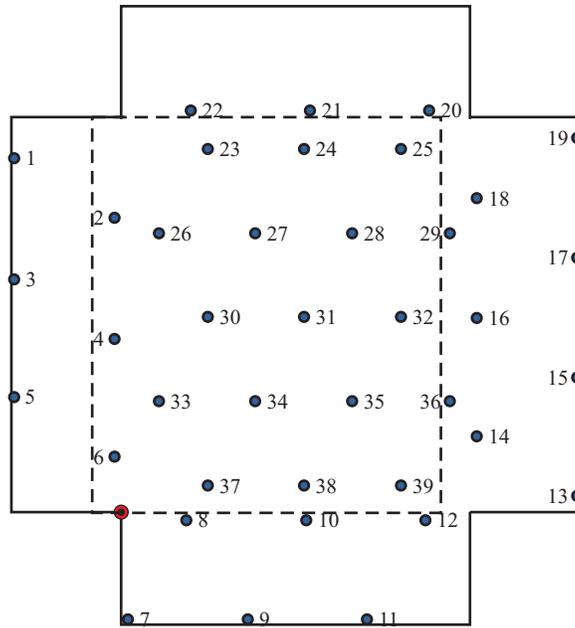
Floor: 44.9 m²

Walls below 6 feet: 53.7 m²

Ceiling and walls above 6 feet: 72.6 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

 Sample Point

 South West Corner Reference



Alameda Point, Alameda, California

U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 62
Survey Unit 60
Sample Points

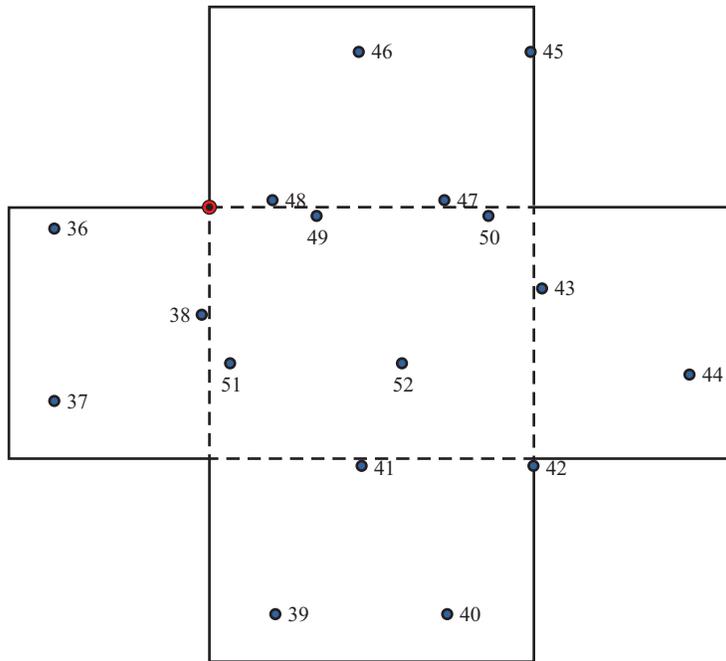
Drawing Not To Scale

Rev 2

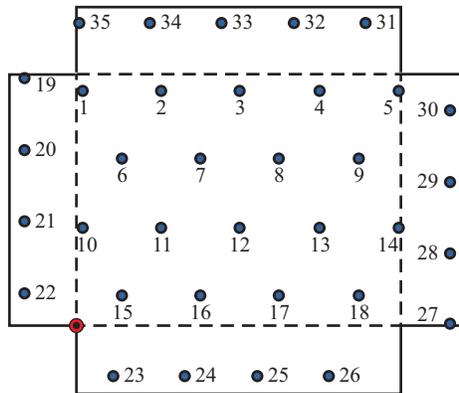
Floor: 60.6 m²

Walls below 6 feet: 57.6 m²

Ceiling and walls above 6 feet: 233.2 m²



Class 2: Ceiling and Walls > 6 Feet



Class 1: Floor and Walls < 6 Feet

● Sample Point

● South West Corner Reference



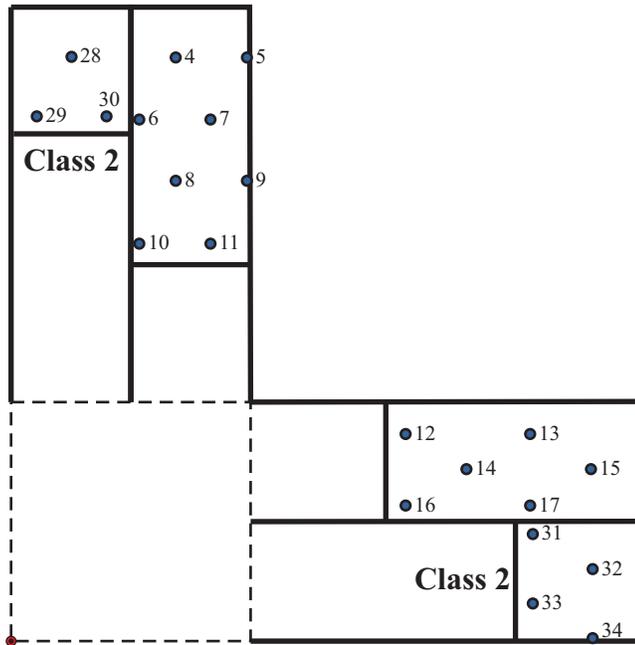
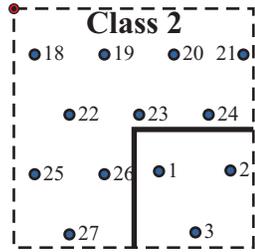
Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 63
Survey Unit 61- X-Ray Room
Sample Points

Drawing Not To Scale

Rev 1

Ceiling and walls above 6 feet: 34.1 m²



Class 1: Ceiling and Walls > 12'

Class 2: Ceiling and Walls > 12'

 Sample Point

 South West Corner Reference



Alameda Point, Alameda, California

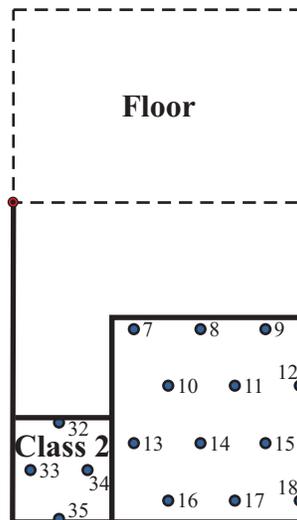
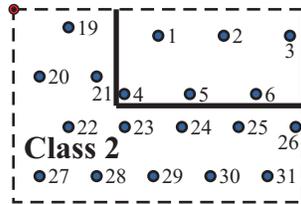
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 64
Survey Unit 62
Ceiling Above SU 30
Sample Points

Drawing Not To Scale

Rev 2

Ceiling and walls below 6 feet: 37.1 m²



Class 1: Ceiling and Walls > 12'

Class 2: Ceiling and Walls > 12'

 Sample Point

 South West Corner Reference



Alameda Point, Alameda, California
U.S. Department of the Navy, BRAC PMO West, San Diego, California

FIGURE 65
Survey Unit 63
Ceiling Above SU39
Sample Points

Drawing Not To Scale

Rev 2

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TABLES

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TABLE 1: BUILDING 5 APPLICABLE STANDARD OPERATING PROCEDURES

Task Specific Plan for Building 5 Alameda Point, Alameda, California

Procedure	Title	Rev
SOP 002	Radiation Work Permits	0
SOP 004	Project Dosimetry	0
SOP 006	Radiation and Contamination Surveys	0
SOP 007	Preparation of Portable Radiation and Contamination Survey Meters for Field Use	0
SOP 008	Air Sampling and Sample Analysis	0
SOP 009	Sampling Procedures for Radiological Surveys	0
SOP 010	RCA Posting and Access Control	0
SOP 011	Control of Radioactive Materials	0
SOP 012	Release of Materials and Equipment	0
SOP 016	Decontamination of Equipment and Tools	0
SOP 022	Radiological Clothing Selection, Monitoring and Decontamination	0
SOP 023	Source Control	0
SOP 024	Occurrence Reporting	0
RP-OP-017	Operation of the Ludlum Model 2929 Dual Scaler	0
RP-OP-025	Operation of the Ludlum Model 2221	0
RP-OP-026	Operation of the Ludlum Model 19	0
SCM-OPS-01	Position Sensitive Proportional Counters Purging	0
SCM-OPS-02	Position Sensitive Proportional Counters Plateau Determination	0
SCM-OPS-03	Position Sensitive Proportional Counters Position Calibration	1
SCM-OPS-04	Encoder Calibration	0
SCM-OPS-05	Position Sensitive Proportional Counters Efficiency Calibration	0
SCM-OPS-06	Position Sensitive Proportional Counters Quality Assurance	1
SCM-SETUP-01	Position Sensitive Proportional Counters Repair	0
SCM-SETUP-02	Hardware Setup	0
SCM-SETUP-03	Quality Assurance Testing of SCM	0

TABLE 2: BUILDING 5 PRIMARY RADIATION PROPERTIES AND RELEASE CRITERIA FOR RADIONUCLIDES OF CONCERN

Task Specific Plan for Building 5 Alameda Point, Alameda, California

Radionuclide	Primary Radiation Properties		Release Criteria ^a				
	Half-Life	Type	Materials & Equipment		Building Surfaces		Soils
			Total Surface Activity	Removable Activity	Total Surface Activity	Removable Activity	pCi/gm
Ra-226	1.6E03 years	Alpha Gamma ^b	100	20	100	20	1.0 ^c
H-3	12.33E00 years	Beta	5,000	1,000	5,000	1,000	2.28

Notes:

- a Units are disintegrations per minute (dpm) per 100 square centimeters (cm²)
- b Ra-226 decays by alpha, but there are low abundance gammas from progeny. The primary means of decay is alpha, but surveying for Ra-226 in soil is done with a gamma sensitive detector.
- c Goal is 1 pCi/g above background per agreement with U.S. Environmental Protection Agency.

H-3 Tritium
 pCi/gm Picocurie per gram
 Ra-226 Radium-226

Source:

ChaduxTt. 2010a. Final Work Plan for Basewide Radiological Surveys Former Naval Air Station Alameda, Alameda, California. July 23.

TABLE 3: SUMMARY OF DATA QUALITY OBJECTIVES

Task Specific Plan for Building 5 Alameda Point, Alameda, California

STEP 1 Statement of problem	STEP 2 Decisions	STEP 3 Inputs to the Decisions	STEP 4 Boundaries of Study	STEP 5 Decision Rules	STEP 6 Limits on decision Errors	STEP 7 Optimizing the Sampling Design
<p>Building 5 is listed in the HRA as an area impacted by radiological activities. The isotopes of concern are Ra-226 and H-3.</p> <p>It must be determined if the site-specific release criteria for these isotopes have been met or if remediation is warranted.</p>	<p>The primary use of the data expected to result from completion of this TSP is to support the Final Status Survey of Building 5.</p> <p>Therefore the decision to be made can be stated as "Do the results of the survey meet the release criteria?"</p>	<p>Radiological surveys required to support the Final Status Survey of Building 5 will include:</p> <ul style="list-style-type: none"> • 100 percent scan surveys of Class 1 areas • 50 percent scan surveys of Class 2 areas • A minimum of 17 systematic static measurements will be performed in Class 1 areas • A minimum of 17 systematic static measurements will be performed in Class 2 areas • One swipe survey per 100 square feet of surface of Class 1 and Class 2 areas and one swipe at each systematic sample location • Sediment samples as available in each drain will be collected. 	<p>The lateral and vertical spatial boundaries for this survey effort are confined to the interior of Building 5. All of the first floor is within the boundaries of the study. Former radium paint shop rooms and surrounding buffer areas, including a stairwell and elevator are within the boundaries of the study.</p>	<p>If the concentration of radioactivity on building surfaces, paved areas, or in soil samples is less than the release criteria, then no further measurements are required.</p> <p>If the results of the survey exceed the release criteria, then the building will be further investigated.</p>	<p>Limits on decision errors are set at 5 percent as specified in the Work Plan (ChaduxTt 2010a).</p>	<p>Operation details for the radiological survey process have been developed. The theoretical assumptions are based on guidelines contained in MARSSIM (NRC 2000). Specific assumptions regarding types of radiation measurements, instrument detection capabilities, quantities and locations of data to be collected, and investigation levels are contained in this TSP and the Work Plan (ChaduxTt 2010a).</p>

Notes:

DU Depleted Uranium
HRA Historical Radiological Assessment
MARSSIM Multi-Agency Radiation Survey and Site Investigation Manual

NRC Nuclear Regulatory Commission
Ra-226 Radium-226
TSP Task Specific Plan

TABLE 4: DEFINABLE FEATURES OF WORK FOR RADIOLOGICAL SURVEYS

Task Specific Plan for Building 5 Alameda Point, Alameda, California

ACTIVITY	PREPARATORY (Prior to initiating survey activity)	DONE	INITIAL (At onset of survey activities)	DONE	FOLLOW-UP (Ongoing during survey activities)	DONE
Radiological Surveys	<ul style="list-style-type: none"> • Verify that an approved TSP is in place. • Verify that the Remedial Project Manager and the Caretaker Site Office are notified about mobilization. • Verify that an approved RWP, if required, is available and has been read and signed by assigned personnel. • Verify that the Work Plan, SSHP, APP and TSP, have been reviewed. • Verify that personnel assigned are trained and qualified. • Verify that personnel have been given an emergency notification procedure. • Verify that workers assigned dosimetry have completed NRC Form 4. • Verify that relevant SOPs are available and have been reviewed for equipment to be used. • Verify that equipment is on site and in working order (initial daily check). 		<ul style="list-style-type: none"> • Verify that radiological instruments are as specified in the Work Plan (ChaduxTt 2010a) and TSP. • Inspect Training Records. • Verify that reference area measurements have been obtained in accordance with the Work Plan (ChaduxTt 2010a). • Verify that daily checks were performed on all survey instruments. • Verify that instrument calibration and setup are current. • Verify that required dosimetry is being worn. • Verify that field logbooks, and proper forms are in use. • Verify that samples and measurements are being collected in accordance with the TSP, Work Plan and applicable SOPs. • Verify the sample handling is in accordance with the Work Plan (ChaduxTt 2010a) and applicable SOPs. 		<ul style="list-style-type: none"> • Verify that the site is properly posted and secured. • Conduct ongoing inspections of material and equipment. • Verify that daily instrument checks were obtained and documented. • Verify the survey results were documented. • Inspect chain-of-custody and survey logs for completeness. • Verify the survey activities conform to the TSP. • Verify that survey instruments are recalibrated after repairs or modifications. 	

Notes:

APP Accident Prevention Plan
 NRC Nuclear Regulatory Commission
 RWP Radiation Work Permit

SOP Standard Operating Procedure
 SSHP Site Safety and Health Plan
 TSP Task Specific Plan

APPENDIX B
ALAMEDA POINT BASEWIDE RADIOLOGICAL SURVEYS FINAL STATUS SURVEY
REPORTS REFERENCE AREA SURVEY RESULTS (ON CD)

**Alameda Point Basewide Radiological Surveys
Final Status Survey Reports
Reference Area Survey Results**

April 2012

Prepared By:

**Richard W. Dubiel, CHP
Millennium Services, Inc
222 Creekstone Ridge
Woodstock, GA 30188**

1.0 Introduction

This report of reference area survey results (RASR) provides site- and material-specific details used to establish reference point survey values (background) for the final status survey (FSS) at each building surveyed at the former Naval Air Station (NAS) Alameda, now known as Alameda Point. The reference surveys were conducted in accordance with the general approach and methodologies that are given in the work plan for basewide radiological surveys at former NAS Alameda ([ChaduxTt 2010a](#)) and in the standard operating procedures (SOP). The surveys conformed to the requirements of the site safety and health plan (SSHP) ([ChaduxTt 2010b](#)) and accident prevention plan (APP) ([ChaduxTt 2010c](#)) prepared for the basewide survey program. No exceptions to the work plan, SOPs, SSHP, or APP are noted.

2.0 Discussion

Release criteria for the survey sites at Alameda Point are established in the approved work plan ([ChaduxTt 2010a](#)) and the individual task specific plans (TSP). Applicable release criteria for each site surveyed are applied to observations of radioactive activity levels to determine a site's acceptability for free release. Observed activity values are based on activity levels in excess of background radioactivity. To establish background values, a reference area must be identified that consists of construction materials similar to those in the facilities surveyed, but with no potential for contamination from use or storage of radioactive material.

Surveys at the former NAS Alameda consist of alpha and beta surveys. Surveys were performed using gas proportional counters, consisting of both the Surface Contamination Counter (SCM), which uses large Position Sensitive Proportional Counters (PSPC), and the Ludlum 43-68, 126 square-centimeter (cm²) probe attached to a Ludlum 2221 ratemeter.

Reference construction materials include concrete, painted cinder block, drywall, steel, glass, and asphalt and wood. Building 112 was identified as a suitable reference location since the building contained most of the targeted construction materials except for the painted cinder block. Building 398 was identified as a reference area location for painted cinder block. Asphalt surface background was measured in an area adjacent to the Building 114 courtyard, but outside the fenced area where radioactive material had been stored. Neither Building 112, Building 398, nor the area outside the fenced area of the Building 114 courtyard has been identified in the Historical Radiological Assessment ([Weston 2007](#)) with a history of use, or potential use, of radioactive materials. Therefore, Buildings 112, 398, and the area outside the fenced area of the Building 114 courtyard meet the criteria for reference areas. The Building 114 courtyard area is shown in [Figure 1](#). [Figure 1](#) also identifies Building 66 which is as part of the survey project as a geographical reference. [Figure 2](#) shows a close up view of the location of Buildings 112 and 398 relative to Building 66. All reference area locations within the buildings and on the asphalt surface outside the Building 114 courtyard fence have been marked.

Although material backgrounds may vary throughout the site based on the date of construction, specific material (for example concrete pour) and amount of surface wear or erosion, the areas chosen in Buildings 112 and 398 will be initially applied to all similar construction materials. Evaluations will be made to determine the reasonableness of the background values for each building survey performed during the project. For beta surveys, SCM surveys of the reference

area and survey areas generate thousands of measurements. Through the use of cumulative frequency distribution (CFD) plots, evaluations can be made regarding the distribution of the data sets, including mean and standard deviation. The large number of measurements produced by the SCM provides assurance that the mean values of each data set are well defined. The large number of measurements results in small standard errors (standard deviation divided by the square root of the number of measurements) indicating that subsequent surveys of the same area with similar numbers of measurements will result in mean values very close to the original calculated mean. Comparisons of the mean values from the reference area and the survey area will determine if the reference area is reasonable, conservative, or requires additional review.

Reference area results for alpha surveys are applicable only to hand held instrument measurements. Alpha surveys performed with the SCM do not subtract background. The process applied to SCM output data, including 2 detectors performing the same survey, and comparing the results for each 100 cm² area to a threshold value, is applied to determine if counts obtained are potentially due to actual activity on the surface or a result of random low level counts from background. The application of the logic, based on Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (Nuclear Regulatory Commission [NRC 2000]) Appendix J is described in the approved work plan (ChaduxTt 2010a). The small variability in alpha background values on typical materials of construction as measured with hand held instruments can introduce only a limited error in the data used to assess compliance with release criteria. If areas are observed to have higher than expected alpha background values during performance of hand held surveys, they will be addressed within the survey reports for those areas.

Alpha surveys are performed to assess compliance with criteria that are substantially lower than most beta emitting radionuclides. Alpha background is typically low and contributes little to the activity levels measured or observed and then compared with release criteria. Surveys performed with both the SCM and the Ludlum 43-68 use the particle detection theory discussed in Appendix J to MARSSIM (NRC 2000) to locate areas that may exceed the release criteria. As such, background is not subtracted from the SCM scan results; therefore, measuring or calculating alpha background in reference areas is not necessary. Long (1 or 2 minute) counts with the Ludlum 43-68 detector and 2221 ratemeter are performed for locations identified by the SCM with activities near the release criteria. Background count rates are based on 10-minute counts for static measurements performed with the Ludlum 43-68 and 2221 ratemeter.

Beta surveys are performed to assess compliance with criteria that are typically higher than that of alpha emitting radionuclides. Beta background is much higher than alpha background and will vary based on the material of construction. Even similar materials such as concrete can have substantially different background values based on the type of cement or aggregate used, whether the material is painted or otherwise treated, and the degree to which the cement is finished (lack of aggregate showing on the surface). Material surveys were performed with the SCM operating in both the dynamic (rolling) and the static (stamp) mode. Based on the large number of both dynamic and static measurements obtained with the SCM, reference area data are best displayed CFD plots, which are presented as Figures 3-12 in Appendix A.

Reference areas are expected to exhibit data with normal distribution since radioactive decay follows Poisson statistics relative to decay per unit time and the lack of bias in production of the construction materials. A straight line on a CFD indicates a normal distribution. The slope of

the line represents the standard deviation of the data. The 50 percent value, or location on the CFD line, indicates the average activity of the material and represents the value to be applied to an FSS for SCM surveys. Results of beta surveys performed in FSS areas include a CFD that allows determination of the adequacy of the application of reference area materials. Final status survey CFDs with the 50 percent value near zero indicate the construction materials are comparable to the construction materials in the reference area.

Reference area beta surveys in the same locations were performed with the Ludlum 43-68 and the Ludlum 43-9 detectors with the Ludlum 2221 ratemeter. The background value for one construction material, glass, was established for the hand-held detectors, but not the SCM. Background values were obtained by averaging 10 1-minute counts with each detector on each construction material.

Surveys performed to show compliance with release criteria are evaluated to assess the reasonableness of applied backgrounds. Results with considerably low net values — for example all values negative, indicating a lower background than the applied reference area — will be evaluated and discussed in the FSS for the individual building. Similarly, results with high but uniformly distributed values will be addressed in the FSS for the individual building.

3.0 Results

The results of reference area surveys for alpha emitting radionuclides measured with the Ludlum 43-68 detector and Ludlum 2221 rate meter are presented in [Table 1](#). All four Ludlum 43-68 detectors were used with a single 10-minute count taken on each material of construction except asphalt. A single detector was used to measure background for asphalt since it is anticipated to be the only hand-held detector used in the outdoor asphalt areas of the Building 114 courtyard.

Table 1
ALPHA REFERENCE AREA MATERIAL VALUES (IN CPM)
OBTAINED WITH LUDLUM 43-68 AND 2221 RATE METER

Detector	Concrete	Wood	Glass	Drywall	Painted Cinder Block	Steel	Asphalt
149773	2.7	2.4	2.5	2.5	4.2	3.8	
149768	1.1	1.1	1.4	1	1	1	
177646	1.8	2.2	1.7	3	4.1	2.6	5
148835	2.4	3	2.5	3	3.5	3.2	
Average	2	2.175	2.025	2.375	3.2	2.65	5

Reference area beta survey results with the SCM are presented in [Table 2](#). Each survey included several square meters of surface. The results of the dynamic (rolling) mode are presented in the first five rows. The second five rows represent the static (stamp) mode of operations. The survey name represents the identifier used by the SCM and the survey information management system (SIMS) used to process the data. Individual CFDs for each of surface material for both modes of SCM operation are contained in [Appendix A](#). The mean value is the value that is subtracted from measurements recorded and presented in the FSSs. The data are presented on the CFDs in red. The 95 percent upper confidence level is presented as a blue line and the 90th percentile value is presented as a green line. With the large number of data points, the 95 percent upper confidence level is essentially the 50th percentile, consistent with a normal distribution.

Table 2
BETA REFERENCE AREA MATERIAL VALUES (IN CPM)
OBTAINED WITH THE SCM

Survey Name	Detector Type	Material Type	Mean (cpm)
B4B0102A	Dynamic	Painted Cinder Block	848
B4B0103A	Dynamic	Concrete	636
B4B0104A	Dynamic	Drywall	382
B4B0106A	Dynamic	Steel	406
B4B0107A	Dynamic	Wood	389
B4B0402A	Static	Painted Cinder Block	741
B4B0403A	Static	Concrete	566
B4B0404A	Static	Drywall	352
B4B0406A	Static	Steel	346
B4B0407A	Static	Wood	360

Reference area values for the Ludlum 43-68 and 2221 rate meter were obtained in the same areas as were used for the SCM. The appropriateness of the surface material values are evaluated through the CFDs generated by the SCM. The evaluation validates the decision to use the same

areas for hand-held instrumentation background counts. The values obtained with the four Ludlum 43-68 detectors are presented in [Table 3](#).

Table 3
BETA REFERENCE AREA MATERIAL VALUES (IN CPM)
OBTAINED WITH LUDLUM 43-68 DETECTORS

Detector	Concrete	Wood	Glass	Drywall	Painted Cinder Block	Steel
148835	126.3	119.7	125.7	123.7	135.9	136.7
177646	147.1	106.3	112.2	110	200.8	111.3
149768	126.4	96	107.4	107.7	227.9	104.8
149773	203.1	147	137	164	267	145
Average	150.725	117.25	120.575	126.35	207.9	124.45

The values obtained in the reference areas are subtracted from the measurements obtained in survey areas to determine activity levels, which are then compared with the release criteria. Individual detector reference values are used for surveys performed with individual detectors. Survey forms are presented in [Appendix B](#).

4.0 References

ChaduxTt. 2010a. Final Work Plan for Basewide Radiological Surveys, Former Naval Air Station Alameda, Alameda, California. July 23.

ChaduxTt. 2010b. Final Site Safety and Health Plan for Basewide Radiological Surveys Former Naval Air Station Alameda, Alameda, California. August 6.

ChaduxTt. 2010c. Final Accident Prevention Plan for Basewide Radiological Surveys Former Naval Air Station Alameda, Alameda, California. August 6.

Nuclear Regulatory Commission. 2000. NUREG-1575, *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*, Rev. 1.

Weston Solutions, Inc. 2007. *Historical Radiological Assessment, Volume II, Alameda Naval Air Station, Use of General Radioactive Materials, 1941-2005*. June.

FIGURES

Figure 2 Reference Area Locations



APPENDIX A
REFERENCE AREA SURVEYS SURFACE CONTAMINATION MONITOR
CUMMULATIVE FREQUENCY DISTRIBUTION PLOTS

SCM Dynamic Mode Painted Cinder Block

Survey File Name:	B4B0102A
Survey Date:	November 2, 2010
Survey Equipment:	SCM4
Detector(s):	T180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4d
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99C002AB0012650B4B0102A
Mean Value	848 cpm

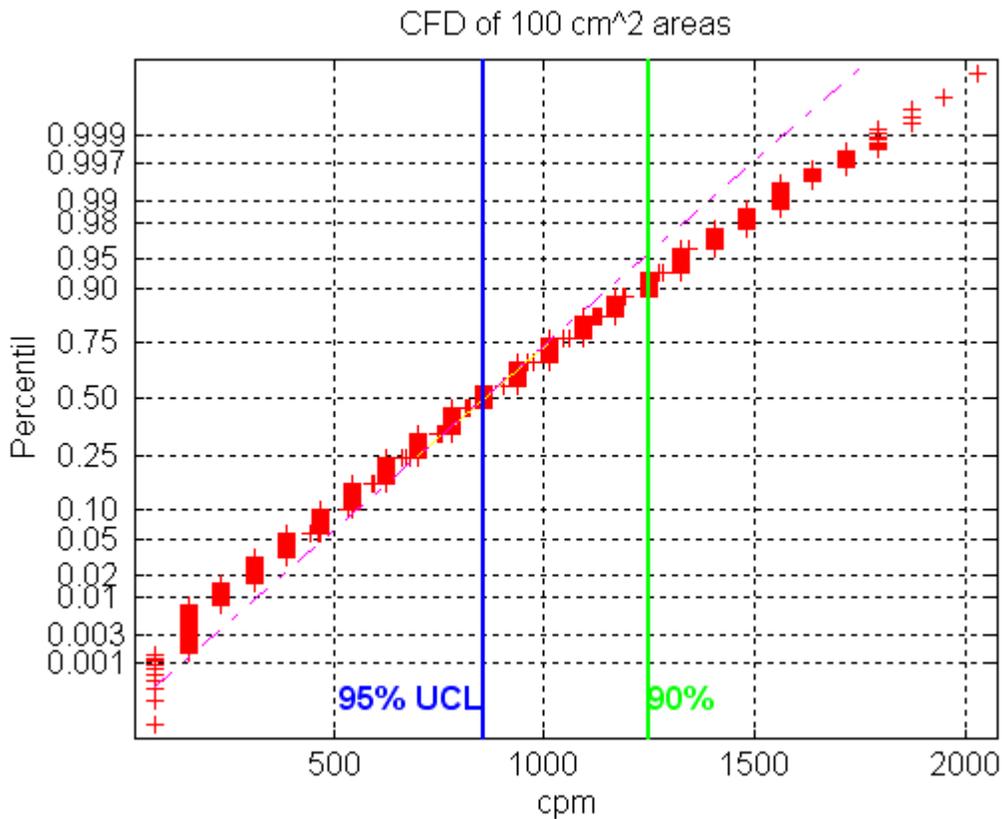


Figure 3: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Dynamic Mode Concrete

Survey File Name:	B4B0103A
Survey Date:	November 2, 2010
Survey Equipment:	SCM4
Detector(s):	T180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4d
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99C001AB0012650B4B0103A
Mean Value:	636

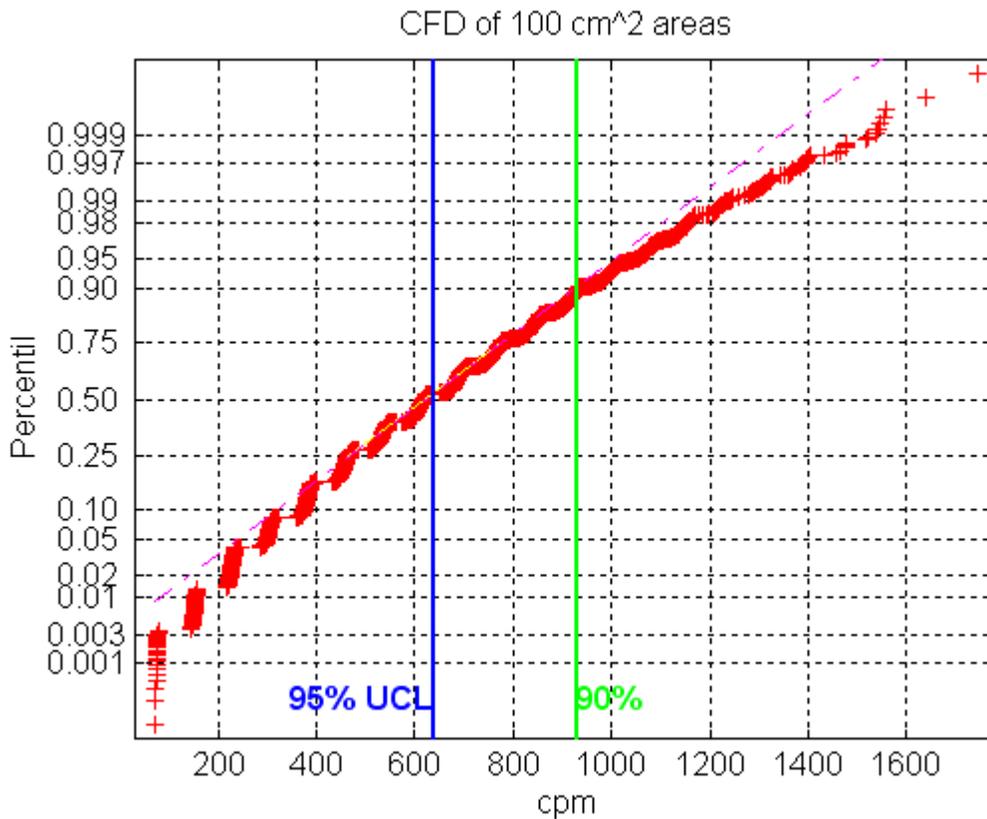


Figure 4: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Dynamic Mode Drywall

Survey File Name:	B4B0104A
Survey Date:	November 2, 2010
Survey Equipment:	SCM4
Detector(s):	T180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4d
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99D001AB0012650B4B0104A
Mean Value:	382

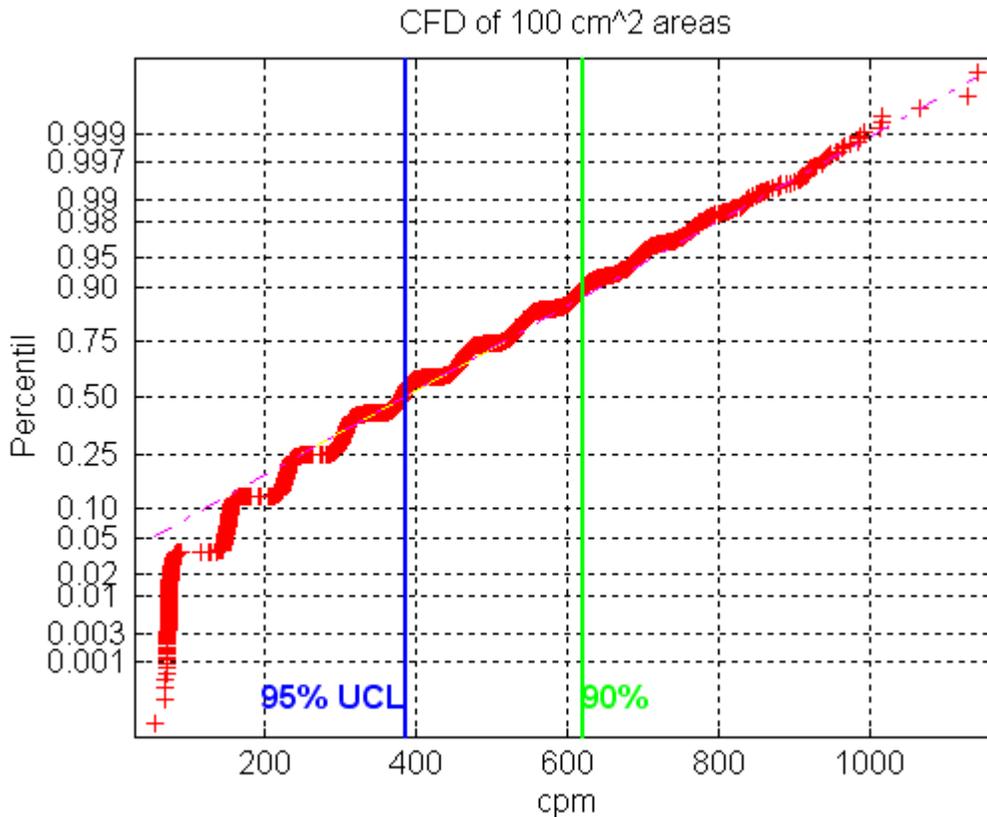


Figure 5: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Dynamic Mode Steel

Survey File Name:	B4B0106A
Survey Date:	November 2, 2010
Survey Equipment:	SCM4
Detector(s):	T180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4d
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99S001AB0012650B4B0106A
Mean Value:	406

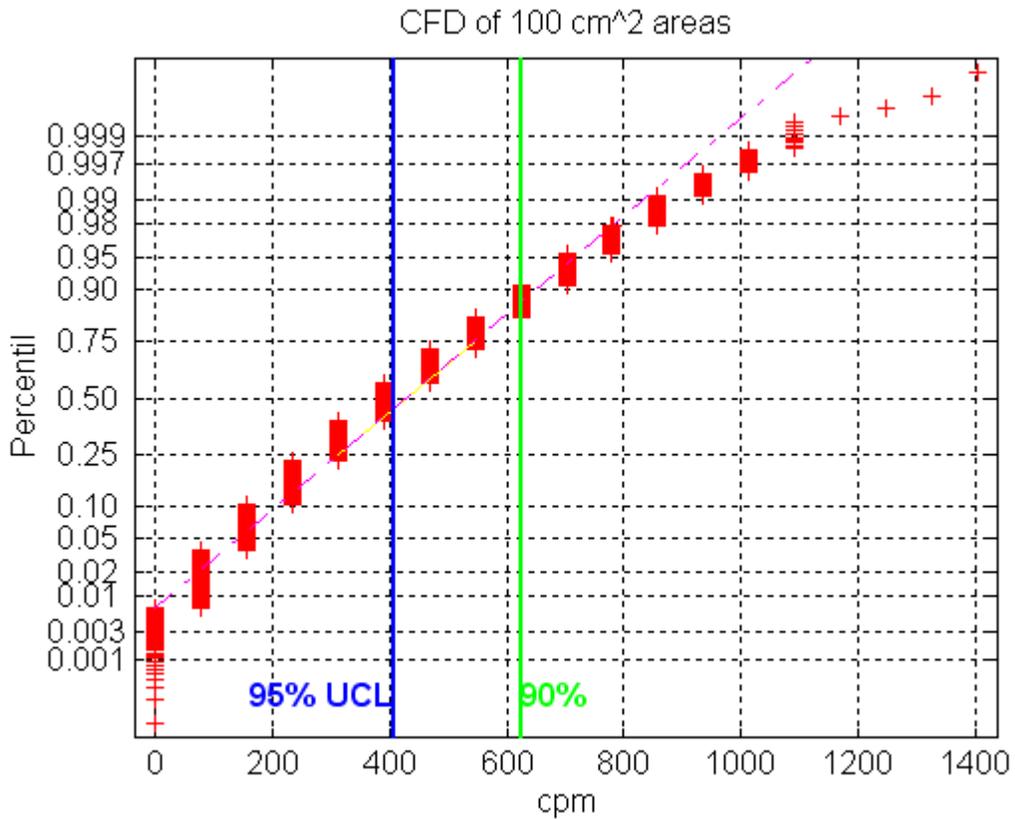


Figure 6: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Dynamic Mode Wood

Survey File Name:	B4B0107A
Survey Date:	November 2, 2010
Survey Equipment:	SCM4
Detector(s):	T180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4d
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99W001AB0012650B4B0107A
Mean Value:	389

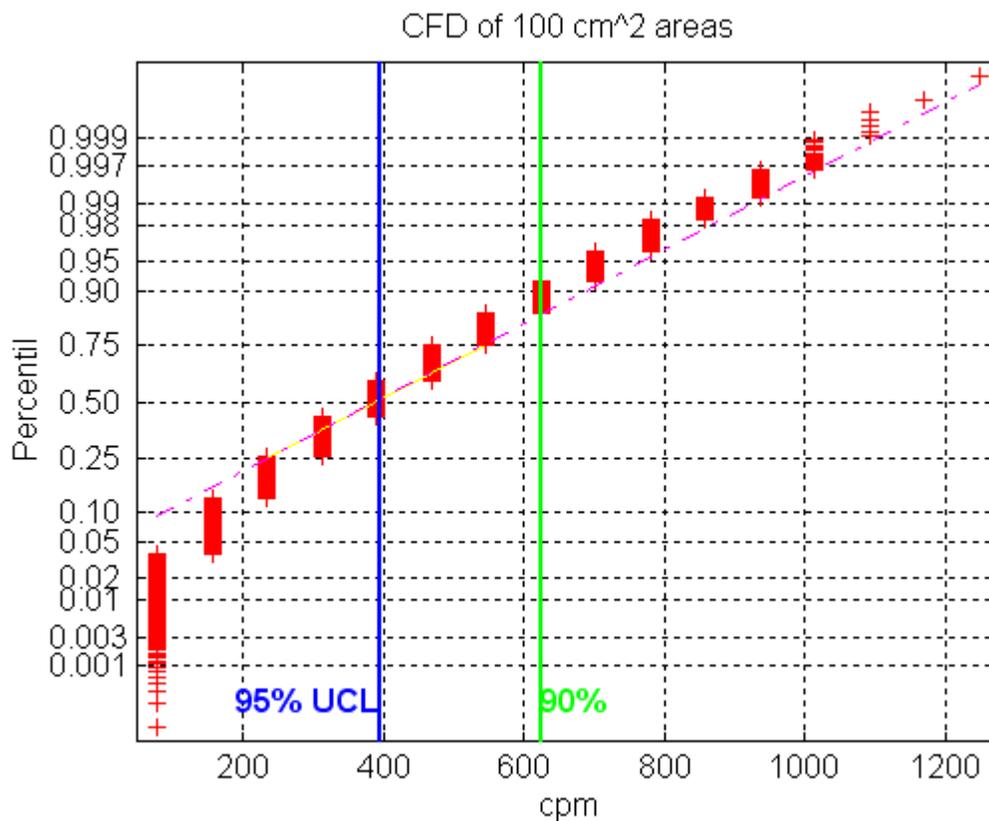


Figure 7: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Static Mode Painted Cinder Block

Survey File Name:	B4B0402A
Survey Date:	November 4, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4a
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99W001AB0012630B4B0402A
Mean Value:	741

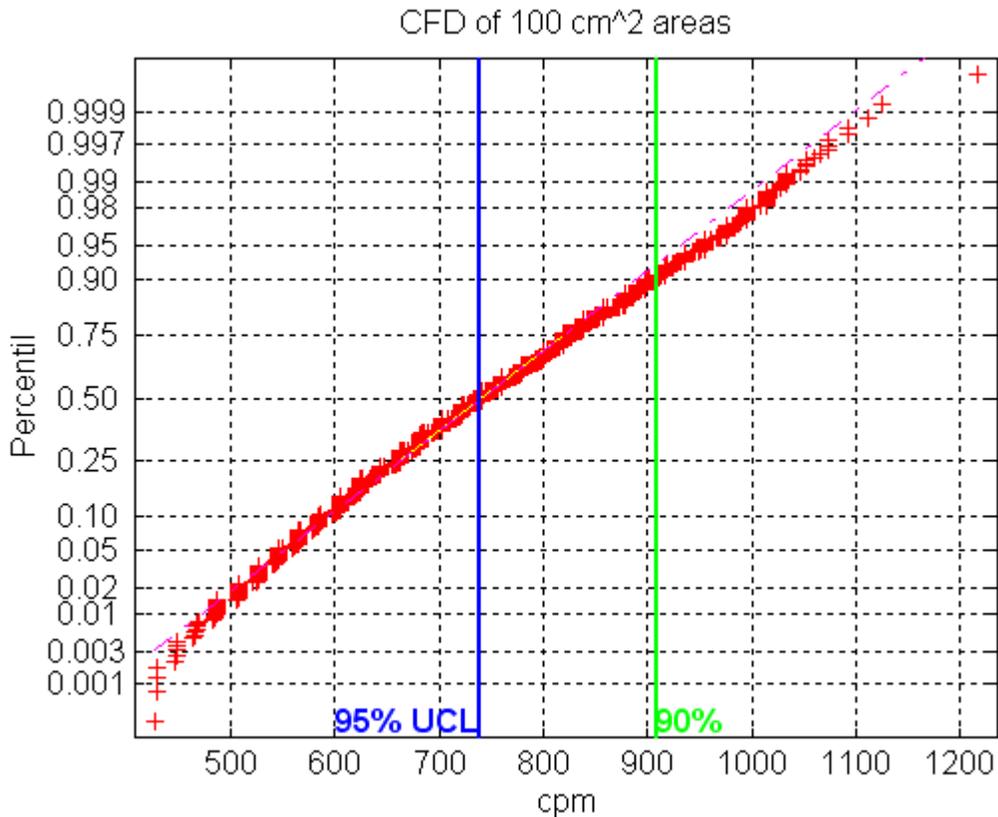


Figure 8: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Static Mode Concrete

Survey File Name:	B4B0403A
Survey Date:	November 4, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4a
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99W001AB0012630B4B0403A
Mean Value:	566

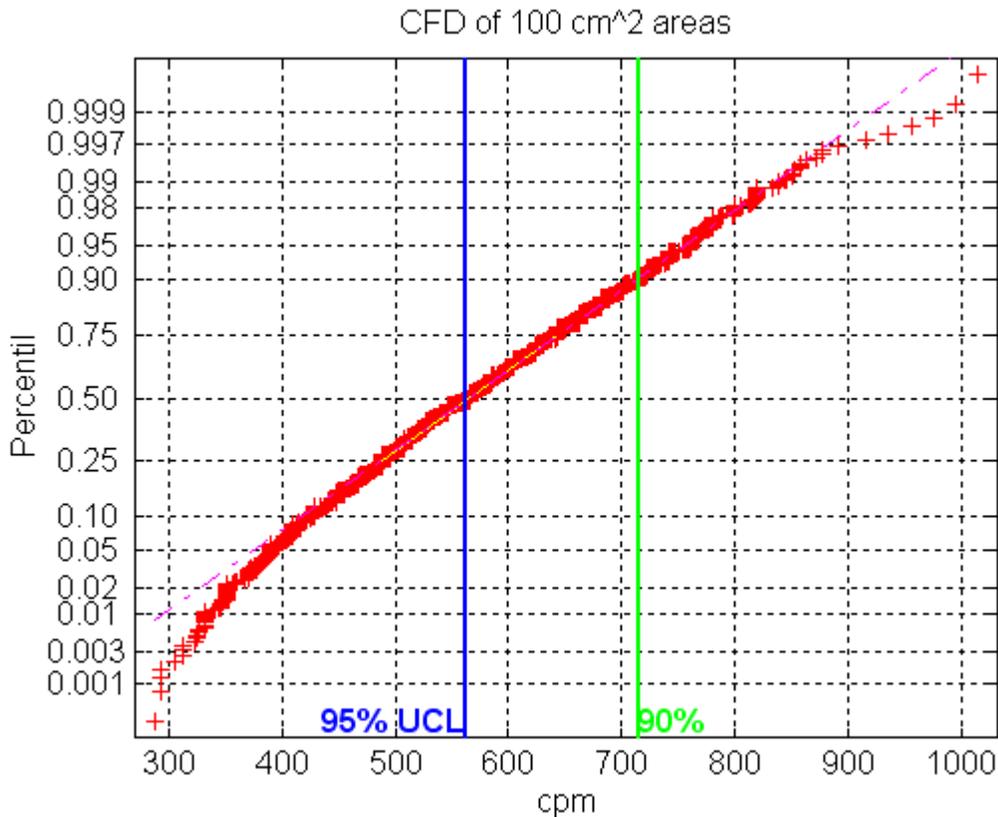


Figure 9: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Static Mode Drywall

Survey File Name:	B4B0404A
Survey Date:	November 4, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4a
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99W001AB0012630B4B0404A
Mean Value:	352

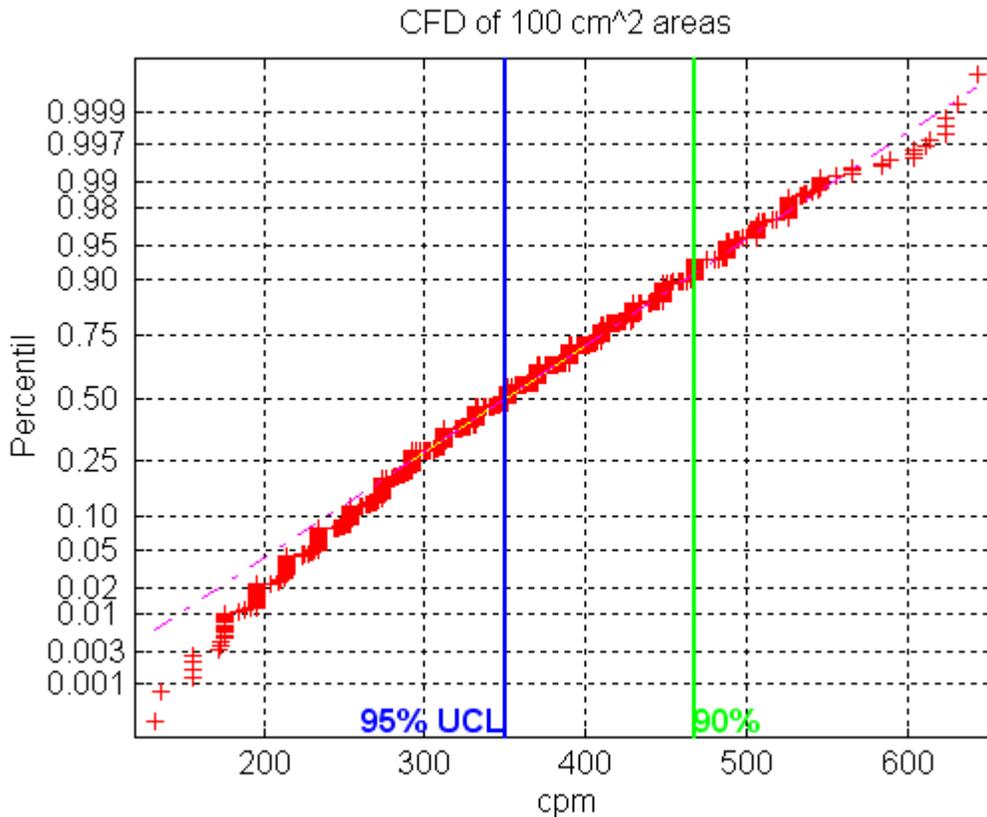


Figure 10: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Static Mode Steel

Survey File Name:	B4B0406A
Survey Date:	November 4, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4a
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99W001AB0012630B4B0406A
Mean Value:	346

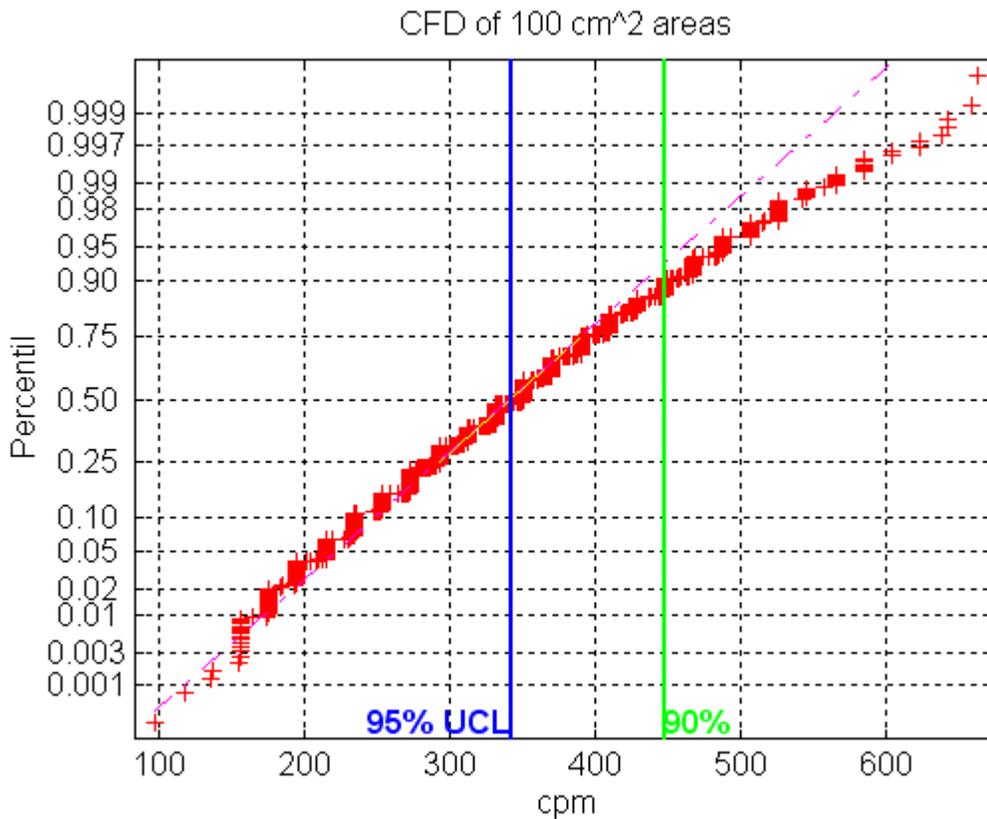


Figure 11: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

SCM Static Mode Wood

Survey File Name:	B4B0407A
Survey Date:	November 4, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
System Information	
SIMS Version:	V5.31
SCM Version:	V3.4a
Survey Results	
Survey Location Code:	N0099X0000FZ0009Z99W001AB0012630B4B0407A
Mean Value:	360

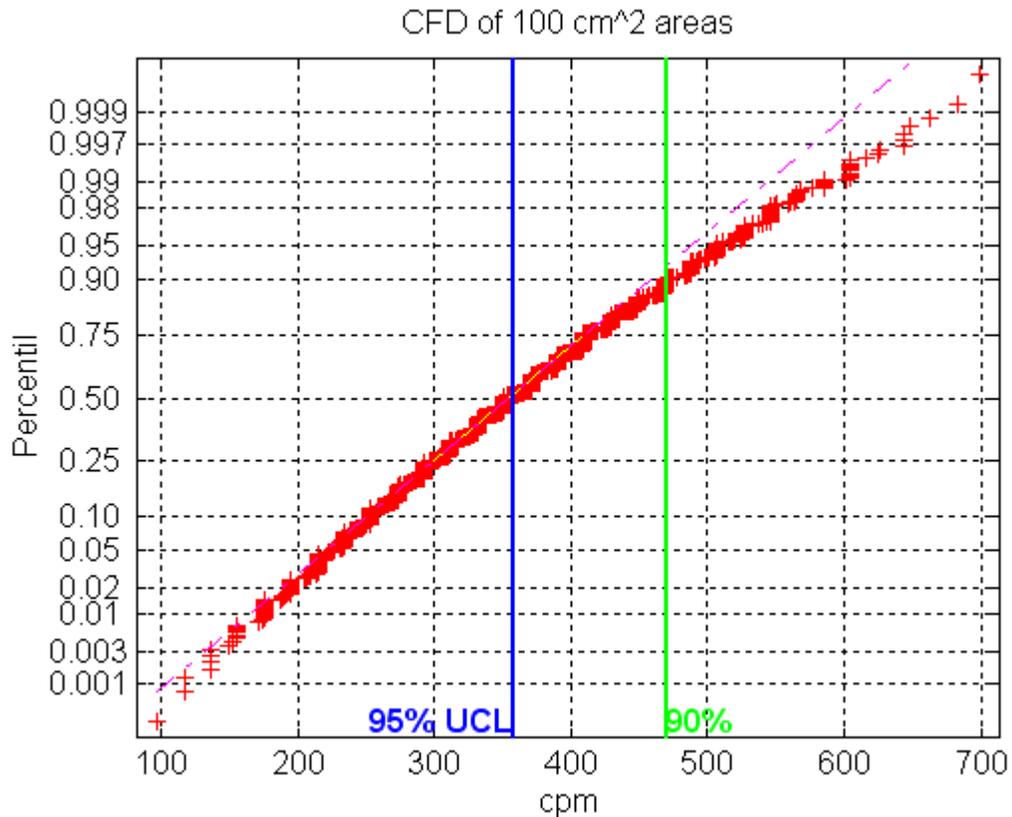


Figure 12: CFD of surface activity in 100cm² areas. The horizontal scale is in cpm per 100cm².

APPENDIX B
REFERENCE AREA SURVEYS LUDLUM 43-68 DETECTOR with
LUDLUM 2221 RATEMETER

DATE: 11-29-10 TIME: 1645		INSTRUMENTATION USED			
SURVEY NUMBER: AP-097-10	Model Inst.	Serial Number	Calibration Due Date	% Efficiency	
SURVEYOR: James Kirby	2221	183194	2-15-10	10 8.7	

Description or drawing: Backgrounds on Material β - 10 - 1 minute counts / α 1 - 10 minute count

Detector

43-68 Serial # PR 148835

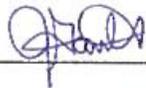
β

Concrete	Wood	Glass	Drywall	Concrete Block	Steel
120	116	123	122	132	165
141	110	112	117	137	129
124	124	117	127	140	117
127	110	131	117	139	141
154	114	129	121	132	127
110	118	130	128	147	134
117	127	133	142	146	139
111	140	125	119	133	140
123	127	134	119	114	135
136	111	123	125	139	140

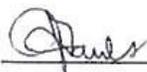
α

Concrete	Wood	Glass	Drywall	Concrete Block	Steel
2.4 cpm	3 cpm	2.5 cpm	3 cpm	3.5 cpm	3.2 cpm

Reviewed by: _____



DATE: 11/5/10	TIME: 1:40	INSTRUMENTATION USED				
SURVEY NUMBER: APD 46-10	APD 46-10	Model Inst.	Serial Number	Calibration Due Date	% Efficiency	
SURVEYOR: Lili Patrick		2221	148451	2/15/11	α .09 / β .085	
Description or drawing: Backgrounds on Material β - 10 - 1 minute counts / α 1 - 10 minute count						
Detector						
43-68 Serial # <u>177646</u>						
β	Concrete	Wood	Glass	Drywall	Concrete Block	Steel
	157	98	106	112	217	111
	162	94	108	105	218	108
	151	99	121	116	196	97
	151	117	102	103	218	103
	146	98	117	126	188	127
	145	126	112	103	191	118
	161	101	99	106	188	109
	123	118	116	127	196	92
	143	95	123	107	194	126
	131	117	118	95	202	122
	α	Concrete	Wood	Glass	Drywall	Concrete Block
18		22	17	30	41	26

Reviewed by: 

DATE: 10/2/10	TIME: 0800	INSTRUMENTATION USED				
SURVEY NUMBER: A001810	Model Inst.	Serial Number	Calibration Due Date	% Efficiency		
SURVEYOR: E. Patrick	2221	190181	2/15/10	.03		
Description or drawing: Backgrounds on Material 10 - 1 minute counts						
Detector 43-68 Serial # 149768						
Concrete	Wood	Glass	Drywall	Concrete Block	Steel	
137	101	104	109	240	112	
137	83	123	105	243	98	
122	102	119	104	251	92	
126	105	110	104	225	104	
131	101	113	121	218	89	
125	86	88	120	210	119	
122	103	121	101	229	110	
142	98	98	104	229	112	
104	96	100	98	224	95	
118	85	98	111	210	117	
[ALL RESULTS ARE CPM]						
Detector 44-9 Serial# 169468						
Concrete	Wood	Glass	Drywall	Concrete Block	Steel	
451	337	304	448	605	408	
430	400	348	447	618	430	
533	351	409	431	578	500	
621	357	400	401	545	487	
613	408	452	531	586	472	
615	413	338	461	496	480	
563	422	375	412	488	489	
575	441	342	442	492	410	
520	293	333	412	462	440	
510	408	331	380	469	402	
[ALL RESULTS ARE CPM]						

Reviewed by: 

DATE: 10/12/10	TIME: 0900	INSTRUMENTATION USED			
SURVEY NUMBER: AP01910	Model Inst.	Serial Number	Calibration Due Date	% Efficiency	
SURVEYOR: E. PATRICK	2221	148426	2/15/11	.08	

Description or drawing: Backgrounds on Material 10 - 1 minute counts

Detector

43-68 Serial # 149773

Concrete	Wood	Glass	Drywall	Concrete Block	Steel
199	147	137	164	267	145
195	164	155	166	318	140
188	153	165	150	248	131
193	147	159	150	273	134
206	147	159	183	275	154
213	136	173	167	279	152
214	152	157	150	291	141
206	165	151	142	291	151
233	163	178	181	270	148
184	191	155	169	268	131

[ALL RESULTS ARE CPM]

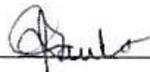
Detector

44-9 Serial# 147890

Concrete	Wood	Glass	Drywall	Concrete Block	Steel
313	287	189	320	328	383
385	186	204	292	423	333
377	250	211	317	387	371
401	251	176	331	468	247
406	215	256	276	369	311
264	296	213	295	485	283
426	204	199	313	304	341
349	247	183	321	417	270
436	237	201	281	432	267
420	265	226	269	427	334

[ALL RESULTS ARE CPM]

Reviewed by:



DATE:	TIME:	INSTRUMENTATION USED				
11-8-10	1400					
SURVEY NUMBER:		Model Inst.	Serial Number	Calibration Due Date	% Efficiency	
AP-056-10						
SURVEYOR: Larry Casey		2201	148451	2-15-11	9	

Description or drawing: Backgrounds on Asphalt β - 10 - 1 minute counts / α 1 - 10 minute count

Detector

43-68 Serial # 148451/177646

β

Asphalt
NA

α

Asphalt
50

Reviewed by: 

APPENDIX C
INSTRUMENT INFORMATION (ON CD)

**APPENDIX C
INSTRUMENT INFORMATION**

Table of Contents

1. SCMs Calibration Information.....	C-1
2. Hand Held Instrument Calibration Information	C-7
3. Smear Counter Calibration Information	C-19
4. Dose Rate Meter Calibration Information.....	C-21

ATTACHMENT A
PSPC EFFICIENCY WORKSHEET RA-226 – SCM MODEL III

Equipment Configuration

SCM III S/N:	4	Computer S/N:	TLSYS81801406
Electronics S/N:	SRA E006	HV Pre-amp S/N:	18
LV Pre-amp S/N:	17	A/B LLD Settings (mV):	26 / 26
Operating Voltage (V):	1350	PSPC Type (e.g. TI80):	R180
Mylar Thickness (mg/cm ²):	0.8	Speed (in./sec) or Count Time (msec):	0.5 in/sec
Recount Method (circle):	Average / Gamma Subtraction / NA		

Calibration Source(s) Information

Serial Number	Isotope	Emission Type	Half Life (years)	Assay Date	Activity	Active Area (cm ²)	Decay Corrected Activity*
1451-97	Th-230	Alpha	75400	2-1-11	24066	.20	24066

Data File Information

Filename	Number of Strips
P4TH230A	30

Efficiency Calculation

Average (cpm/100 cm ²)	Instrument Efficiency
13340	0.554

* To calculate the decay corrected activity in disintegrations/sec/100 cm²:

$$\text{Decay Corrected } q_{4\pi} = \left[q_{4\pi} \cdot e^{-\frac{(\ln 2)t}{T_{1/2}}} \right] \cdot \left[\frac{100}{A} \right], \text{ where}$$

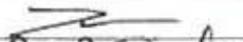
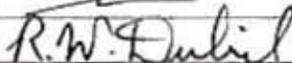
t = time, in years, between assay date and calibration date

T_{1/2} = half life, in years

A = active area (cm²)

NOTE: The 100/A factor is only used when the area of the calibration source is larger than the width of the PSPC.

Data Review

Data Review	Name	Date	Signature
Operator	Don DeBord	2-8-11	
Operator			
Data Processor	Don DeBord	2-8-11	
Project Manager	Dick Dubiel	2-8-11	

ATTACHMENT A
PSPC EFFICIENCY WORKSHEET RA-226 – SCM MODEL III

Equipment Configuration

SCM III S/N:	4	Computer S/N:	TLSYS81801406
Electronics S/N:	SRA E006	HV Pre-amp S/N:	18
LV Pre-amp S/N:	17	A/B LLD Settings (mV):	26 / 26
Operating Voltage (V):	1350	PSPC Type (e.g. T180):	C180
Mylar Thickness (mg/cm ²):	0.8	Speed (in./sec) or Count Time (msec):	8000 msec
Recount Method (circle):	Average	Gamma Subtraction / NA	

Calibration Source(s) Information

Serial Number	Isotope	Emission Type	Half Life (years)	Assay Date	Activity	Active Area (cm ²)	Decay Corrected Activity*
1451-97	Th-230	Alpha	75400	2-1-11	24066	.20	24066

Data File Information

Filename	Number of Strips
G4TH230A	30

Efficiency Calculation

Average (cpm/100 cm ²)	Instrument Efficiency
12865	0.535

* To calculate the decay corrected activity in disintegrations/sec/100 cm²:

$$\text{Decay Corrected } q_{ix} = \left[q_{ix} \cdot e^{-\frac{(\ln 2)t}{T_{1/2}}} \right] \cdot \left[\frac{100}{A} \right], \text{ where}$$

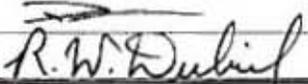
t = time, in years, between assay date and calibration date

T_{1/2} = half life, in years

A = active area (cm²)

NOTE: The 100/A factor is only used when the area of the calibration source is larger than the width of the PSPC.

Data Review

Data Review	Name	Date	Signature
Operator	Don DeBord	2-8-11	
Operator			
Data Processor	Don DeBord	2-8-11	
Project Manager	Dick Dubiel	2-8-11	

ATTACHMENT A
PSPC EFFICIENCY WORKSHEET RA-226 – SCM MODEL III

Equipment Configuration

SCM III S/N:	8	Computer S/N:	TLSYS81800063
Electronics S/N:	SRA E009	HV Pre-amp S/N:	11
LV Pre-amp S/N:	12	A/B LLD Settings (mV):	20 / 20
Operating Voltage (V):	1360	PSPC Type (e.g. T180):	C180
Mylar Thickness (mg/cm ²):	0.8	Speed (in./sec) or Count Time (msec):	8000 msec
Recount Method (circle):	Average / Gamma Subtraction / <u>NA</u>		

Calibration Source(s) Information

Serial Number	Isotope	Emission Type	Half Life (years)	Assay Date	Activity	Active Area (cm ²)	Decay Corrected Activity*
1451-97	Th-230	Alpha	75400	2-1-11	24066	.20	24066

Data File Information

Filename	Number of Strips
G8TH230A	30

Efficiency Calculation

Average (cpm/100 cm ²)	Instrument Efficiency
13096	0.544

* To calculate the decay corrected activity in disintegrations/sec/100 cm²:

$$\text{Decay Corrected } q_{4\pi} = \left[q_{4\pi} \cdot e^{\frac{-(\ln 2)t}{T_{1/2}}} \right] \cdot \left[\frac{100}{A} \right], \text{ where}$$

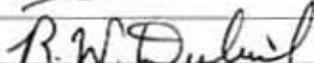
t = time, in years, between assay date and calibration date

T_{1/2} = half life, in years

A = active area (cm²)

NOTE: The 100/A factor is only used when the area of the calibration source is larger than the width of the PSPC.

Data Review

Data Review	Name	Date	Signature
Operator	Don DeBord	2-8-11	
Operator			
Data Processor	Don DeBord	2-8-11	
Project Manager	Dick Dubiel	2-8-11	

ATTACHMENT A
PSPC EFFICIENCY WORKSHEET RA-226 – SCM MODEL III

Equipment Configuration

SCM III S/N:	9	Computer S/N:	TLSYS81800167
Electronics S/N:	SRA E008	HV Pre-amp S/N:	19
LV Pre-amp S/N:	20	A/B LLD Settings (mV):	23 / 23
Operating Voltage (V):	1360	PSPC Type (e.g. T180):	C180
Mylar Thickness (mg/cm ²):	0.8	Speed (in./sec) or Count Time (msec):	8000 msec
Recount Method (circle):	Average / Gamma Subtraction / NA		

Calibration Source(s) Information

Serial Number	Isotope	Emission Type	Half Life (years)	Assay Date	Activity	Active Area (cm ²)	Decay Corrected Activity*
1451-97	Th-230	Alpha	75400	2-1-11	24066	.20	24066

Data File Information

Filename	Number of Strips
G9TH230A	30

Efficiency Calculation

Average (cpm/100 cm ²)	Instrument Efficiency
12546	0.521

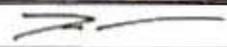
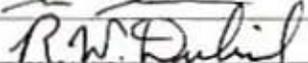
* To calculate the decay corrected activity in disintegrations/sec/100 cm²:

$$\text{Decay Corrected } q_{4\pi} = \left[q_{4\pi} \cdot e^{-\frac{(\ln 2)t}{T_{1/2}}} \right] \cdot \left[\frac{100}{A} \right], \text{ where}$$

t = time, in years, between assay date and calibration date
 T_{1/2} = half life, in years
 A = active area (cm²)

NOTE: The 100/A factor is only used when the area of the calibration source is larger than the width of the PSPC.

Data Review

Data Review	Name	Date	Signature
Operator	Don DeBord	2-8-11	
Operator			
Data Processor	Don DeBord	2-8-11	
Project Manager	Dick Dubiel	2-8-11	

ATTACHMENT A
PSPC EFFICIENCY WORKSHEET RA-226 – SCM MODEL III

Equipment Configuration

SCM III S/N:	9	Computer S/N:	TLSYS81800167
Electronics S/N:	SRA E008	HV Pre-amp S/N:	19
LV Pre-amp S/N:	20	A/B LLD Settings (mV):	23 / 23
Operating Voltage (V):	1360	PSPC Type (e.g. T180):	R180
Mylar Thickness (mg/cm ²):	0.8	Speed (in./sec) or Count Time (msec):	0.5 in/sec
Recount Method (circle):	Average / Gamma Subtraction / NA		

Calibration Source(s) Information

Serial Number	Isotope	Emission Type	Half Life (years)	Assay Date	Activity	Active Area (cm ²)	Decay Corrected Activity*
1451-97	Th-230	Alpha	75400	2-1-11	24066	.20	24066

Data File Information

Filename	Number of Strips
P9TH230A	30

Efficiency Calculation

Average (cpm/100 cm ²)	Instrument Efficiency
14073	0.585

* To calculate the decay corrected activity in disintegrations/sec/100 cm²:

$$\text{Decay Corrected } q_{ax} = \left[q_{ax} \cdot e^{-\frac{(\ln 2)t}{T_{1/2}}} \right] \cdot \left[\frac{100}{A} \right], \text{ where}$$

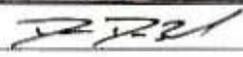
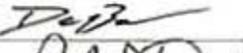
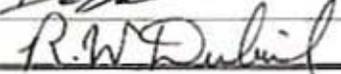
t = time, in years, between assay date and calibration date

T_{1/2} = half life, in years

A = active area (cm²)

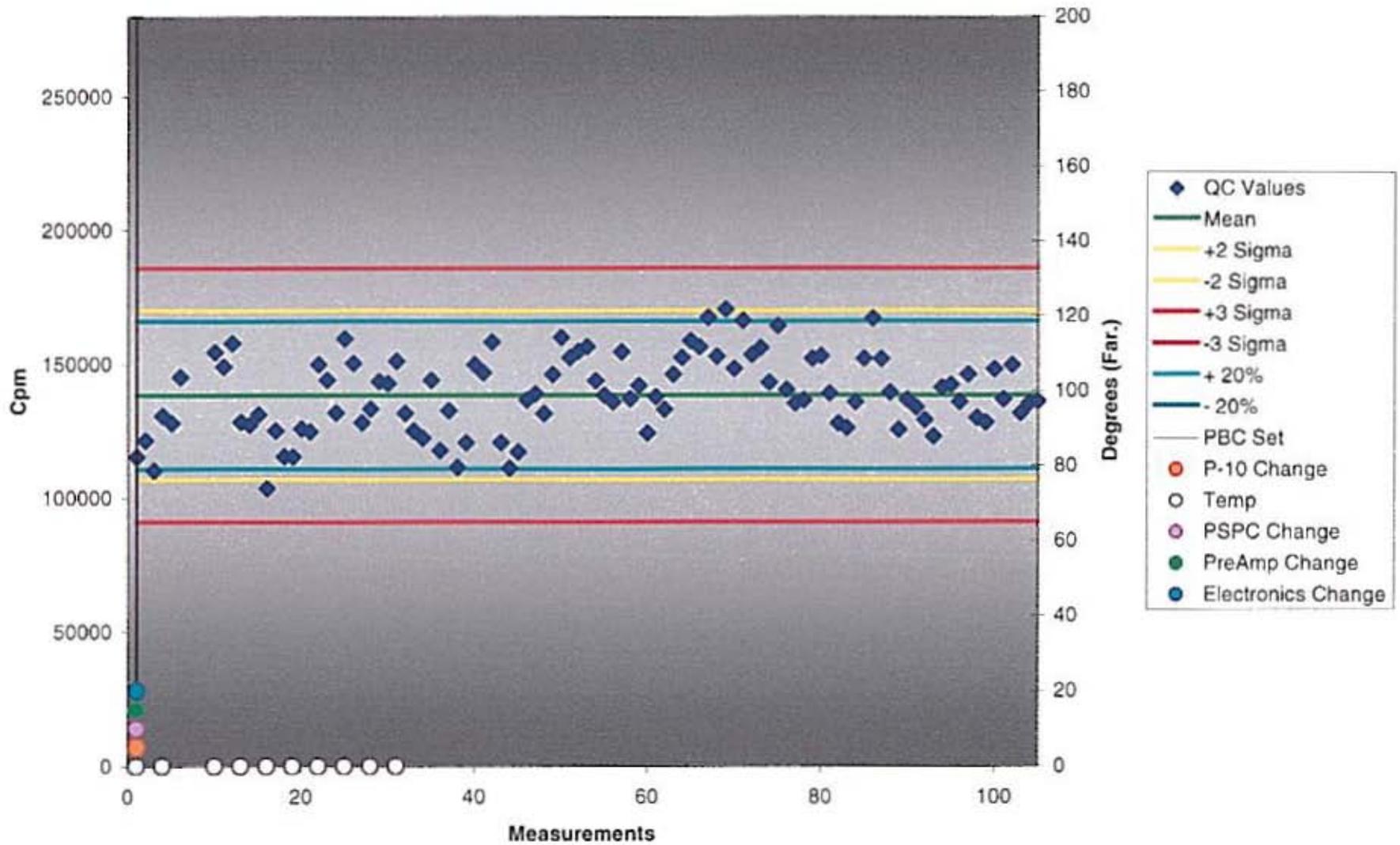
NOTE: The 100/A factor is only used when the area of the calibration source is larger than the width of the PSPC.

Data Review

Data Review	Name	Date	Signature
Operator	Don DeBord	2-8-11	
Operator			
Data Processor	Don DeBord	2-8-11	
Project Manager	Dick Dubiel	2-8-11	

Typical QC Chart for SCMs

SCM4 T-180 Beta Performance Based Checks





Designer and Manufacturer
of
Scientific and Industrial
Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER MILLENNIUM SERVICES INC ORDER NO. 20147695/346446
Mfg. Ludlum Measurements, Inc. Model 2221 Serial No. 183984
Mfg. Ludlum Measurements, Inc. Model 44-9 Serial No. PR-209686
Cal Date 15-Feb-10 Cal Due Date 15-Feb-11 Cal. Interval 1 Year Meterface 202-159

Check mark applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 20 % Alt 698.8 mm Hg

- New Instrument Instrument Received Within Toler. +-10% 10-20% Out of Tol. Requiring Repair Other-See comments
- Mechanical ck. Meter Zeroed Background Subtract Input Sens. Linearity
 F/S Resp. ck. Reset ck. Window Operation Geotropism
 Audio ck. Alarm Setting ck. Batt. ck. (Min. Volt) 4.4 VDC
 Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set Comments V Input Sens. Comments mV Det. Oper. Comments V at Comments mV Threshold Dial Ratio 100 = 10 mV

HV Readout (2 points) Ref./Inst. 500 / 489 V Ref./Inst. 2000 / 1999 V

COMMENTS:

Probe: 44-9 43-68 (Alpha) 43-68 (Beta) instrument is currently
Highvoltage: 900v 1250v 1650v set for 44-9 operation.
Millivoltage: 600 (60mv) 50 (5mv) 50 (5mv)
window: 100 100 100
window position: off off off
Window @ 100 = 1.5 times threshold.
Calibrated with a 5' cable.
See attachment for efficiencies.
Firmware# 26 10 10

Gamma Calibration: GM detectors positioned perpendicular to source except for M-44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 1K	400kcpm	400	400
X 1K	100kcpm	100	100
X 100	40kcpm	400	400
X 100	10kcpm	100	100
X 10	4kcpm	400	400
X 10	1kcpm	100	100
X 1	400cpm	400	400
X 1	100cpm	100	100

*Uncertainty within ± 10% C.F. within ± 20%

ALL Range(s) Calibrated Electronically

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
400kcpm	39906 (6)	39906 (6)	500kcpm	500K cpm	500K cpm
40kcpm	3991	3991	50kcpm	50K	50K
4kcpm	399	399	5kcpm	5K	5K
400cpm	40	40	500cpm	500	500
40cpm	4	4	50cpm	50	50

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCCL 2540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: S-384/1122 1131 781 059 280 60646
Cs-137 Gamma S/N 1162 G112 M565 5105 T1008 T879 E652 E551 720 734 1616 Neutron Am-241 Be S/N T-304
 Alpha S/N Pu239sn:8744 Beta S/N Tc99sn:5280-04, Sr90y90sn:4016 Other
 m 500 S/N 50800 Oscilloscope S/N Multimeter S/N 83990502

Calibrated By: Charles disk Date 15 Feb 10
Reviewed By: Frank Ham Date 15 Feb 10

This certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc. FORM C22A 10/15/2008

AC Inst. Passed Dielectric (Hi-Pot) and Continuity Test
Only Failed

Instrument Type	2121				
Instrument Serial Number	183984				
Probe Type	43-68				
Probe Serial Number	148835				
Operating Voltages (α/β)	1250/1650				
Threshold	50				
Date	10/8/2010				
	Isotope	Instrument Efficiency (ε _i)	Surface Eff. (ε _s)	Fraction(f)	Total Efficiency (ε _t)
1	Th-230	39%	0.25		10%
2	C-14	40%	0.25		10%
3	Tc-99	31%	0.25		16%
4	Tl-204	44%	0.5		22%
5	Sr-90	34%	0.5		17%

Isotope	Th-230	C-14	Tc-99	Tl-204	Sr-90
Serial Number	D7-928	D7-934	A7-132	A7-134	A7-135
Emission Type	Alpha	Beta	Beta	Beta	Beta
Half Life	75000	5730	213000	3.78	28.5
Assay Date	12/1/2006	12/1/2006	8/15/2002	8/7/2002	8/7/2002
q_{2π} Emission Rate	37490	52040	28170	24870	53150
Decay Corrected q_{2π} Emission Rate	37489	52016	28169	5554	43566
Probe Coverage Percent	88%	88%	88%	88%	88%
Adjusted Emission Rate	32990	45774	24789	4888	38338
Measurement 1	12768	18477	7604	2129	12852
Measurement 2	13028	18490	7769	2256	12985
Measurement 3	13062	18624	7597	2180	13009
Measurement 4	12898	18628	7630	2165	13048
Measurement 5	12770	18532	7734	2169	12894
Measurement 6	13003	18479	7640	2205	13179
Measurement 7	12953	18362	7591	2090	12968
Measurement 8	12994	18340	7720	2129	13273
Measurement 9	12834	18428	7867	2118	13094
Measurement 10	13047	18550	7738	2134	13083
Measurement 11	12950	18441	7737	2188	12838
Measurement 12	12779	18533	7846	2182	12853
Measurement 13	12787	18347	7801	2146	13052
Measurement 14	12982	18475	7814	2167	12841
Measurement 15	12986	18506	7903	2143	13085
Measurement 16	12811	18448	7710	2104	12805
Measurement 17	13014	18416	7806	2129	12905
Measurement 18	12857	18304	7797	2092	13071
Measurement 19	12765	18398	7874	2124	13026
Measurement 20	13043	18499	7768	2085	13063
Mean of Measurements	12916.55	18463.85	7747.3	2146.75	12996.2
Efficiency	39%	40%	31%	44%	34%



Designer and Manufacturer
of
Scientific and Industrial
Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER: MILLENNIUM SERVICES INC ORDER NO. 20147895/346446
Mfg. Ludlum Measurements, Inc. Model 2221 Serial No. 148426
Mfg. Ludlum Measurements, Inc. Model 44-9 Serial No. PR-147890
Cal. Date 15-Feb-10 Cal Due Date 15-Feb-11 Cal. Interval 1 Year Meterface 202-159

Check mark Applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 20 % Alt 698.8 mm Hg
 New Instrument Instrument Received Within Toler. +-10% 10-20% Out of Tol. Requiring Repair Other-See comments
 Mechanical ck. Meter Zeroed Background Subtract Input Sens. Linearity
 F/S Resp. ck. Reset ck. Window Operation Geotropism
 Audio ck. Alarm Setting ck. Batt. ck. (Min. Volt) 4.4 VDC
 Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.
Instrument Volt Set 500 V Input Sens. 100 mV Det. Oper. 100 mV Threshold Dial Ratio 100 = 10 mV
 HV Readout (2 points) Ref./Inst. 500 / 500 V Ref./Inst. 2000 / 2003 V

COMMENTS:

Probe: ~~44-9~~ 43-68 (Alpha) ~~43-68 (Beta)~~ instrument is currently set for 44-9 operation.
Highvoltage: 900v 1200v 1650v
Millivoltage: 600 (60mv) 50 (5mv) 50 (5mv)
window: 100 100 100
window position: off off off
Window @ 100 = 1.5 times threshold.
Calibrated with a 5' cable.
See attachment for efficiencies.
Firmware# 26.10.10

Gamma Calibration: GM detectors positioned perpendicular to source except for M44-9 in which the front of probe faces source

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 1K	400kcpm	N/A	400
X 1K	100kcpm	⚡	100
X 100	40kcpm		400
X 100	10kcpm		100
X 10	4kcpm		400
X 10	1kcpm		100
X 1	400cpm		400
X 1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20% ALL Range(s) Calibrated Electronically

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
400kcpm	N/A	39829 (6)	500kcpm	N/A	450K cpm
40kcpm	⚡	3984	50kcpm	⚡	50K
4kcpm		398	5kcpm		5K
400cpm		40	500cpm		500
40cpm		4	50cpm		50

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSS Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: S-394/1122 1131 781 059 280 60846
Cs-137 Gamma S/N 1162 G112 M585 6105 T1008 T879 E552 E551 720 734 1616 Neutron Am-241 Be S/N T-304
 Alpha S/N Pu239sn:8744 Beta S/N Tc99sn:5280-04, Sr90y90sn: 4016 Other _____
 m 500 S/N 50800 Oscilloscope S/N _____ Multimeter S/N 83990502

Calibrated By: Charles disk Date 15 Feb 10
Reviewed By: Rose Han Date 15 Feb 10

AC Inst. Passed Dielectric (Hi-Pot) and Continuity Test
Only Failed

Instrument Type	2121				
Instrument Serial Number	148426				
Probe Type	43-68				
Probe Serial Number	149773				
Operating Voltages (α/β)	1200/1650				
Threshold	50				
Date	10/8/2010				
	Isotope	Instrument Efficiency (ε _i)	Surface Eff. (ε _s)	Fraction(f)	Total Efficiency (ε _t)
1	Th-230	39%	0.25		10%
2	C-14	40%	0.25		10%
3	Tc-99	34%	0.25		9%
4	Tl-204	45%	0.5		22%
5	Sr-90	40%	0.5		20%

Isotope	Th-230	C-14	Tc-99	Tl-204	Sr-90
Serial Number	D7-928	D7-934	A7-132	A7-134	A7-135
Emission Type	Alpha	Beta	Beta	Beta	Beta
Half Life	75000	5730	213000	3.78	28.5
Assay Date	12/1/2006	12/1/2006	8/15/2002	8/7/2002	8/7/2002
q_{2π} Emission Rate	37490	52040	28170	24870	53150
Decay Corrected q_{2π} Emission Rate	37489	52016	28169	5554	43566
Probe Coverage Percent	88%	88%	88%	88%	88%
Adjusted Emission Rate	32990	45774	24789	4888	38338
Measurement 1	13016	18012	8274	2172	15187
Measurement 2	13167	18106	8578	2194	15376
Measurement 3	13011	18293	8401	2173	15525
Measurement 4	13073	18020	8377	2097	15285
Measurement 5	12953	18161	8530	2161	15189
Measurement 6	13128	18053	8286	2188	15515
Measurement 7	13233	17954	8222	2149	15235
Measurement 8	13040	18204	8294	2128	15337
Measurement 9	13101	18214	8514	2225	15490
Measurement 10	12777	18087	8464	2218	15407
Measurement 11	13119	18248	8500	2237	15397
Measurement 12	12972	18130	8425	2175	15632
Measurement 13	13108	18148	8401	2212	15669
Measurement 14	13184	18165	8399	2085	15615
Measurement 15	12936	18334	9478	2213	15294
Measurement 16	13017	17896	8503	2207	15370
Measurement 17	13001	18076	8544	2298	15542
Measurement 18	13347	18432	8521	2269	15607
Measurement 19	12305	18307	8528	2199	15529
Measurement 20	12405	18553	8457	2222	15624
Mean of Measurements	12994.65	18169.65	8484.8	2191.1	15441.25
Efficiency	39%	40%	34%	45%	40%



Designer and Manufacturer
of
Scientific and Industrial
Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER MILLENNIUM SERVICES INC ORDER NO. 20147695/346446
Mfg. Ludlum Measurements, Inc. Model 2221 Serial No. 148451
Mfg. Ludlum Measurements, Inc. Model 44-9 Serial No. PR-169460
Cal. Date 15-Feb-10 Cal Due Date 15-Feb-11 Cal. Interval 1 Year Meterface 202-159

Check mark applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 20 % Alt 698.8 mm Hg
 New Instrument Instrument Received Within Toler. +10% 10-20% Out of Tol. Requiring Repair Other-See comments
 Mechanical ck. Meter Zeroed Background Subtract Input Sens. Linearity
 F/S Resp. ck. Reset ck. Window Operation Geotropism
 Audio ck. Alarm Setting ck. Batt. ck. (Min. Volt) 4.4 VDC
 Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.
Instrument Volt Set Comments V Input Sens. Comments mV Det. Oper. Comments V at Comments mV Threshold Dial Ratio 100 = 10 mV
 HV Readout (2 points) Ref./Inst. 500 / 500 V Ref./Inst. 2000 / 1998 V

COMMENTS:

Probe: 44-9 43-6B (Alpha) 43-6B (Beta) instrument is currently
Highvoltage: 900v 1250v 1650v set for 44-9 operation.
Millivoltage: 600 (60mv) 50 (5mv) 50 (5mv)
window: 100 100 100
window position. off off off
Window 3 100 = 1.5 times threshold.
Calibrated with a 5' cable.
See attachment for efficiencies.
Firmware# 26 10 10

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 1K	400kcpm	N/A	400
X 1K	100kcpm	⚡	100
X 100	40kcpm		400
X 100	10kcpm		100
X 10	4kcpm		400
X 10	1kcpm		100
X 1	400cpm		400
X 1	100cpm		100

*Uncertainty within ± 10% C.F. within ± 20%

ALL Range(s) Calibrated Electronically

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	Log Scale	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout	400kcpm	N/A	⚡	500kcpm	N/A	450K cpm
	40kcpm	3783		50kcpm	50K	50K
	4kcpm	399		5kcpm	5K	5K
	400cpm	40		500cpm	500	500
	40cpm	4		50cpm	50	50

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1B78 State of Texas Calibration License No. LO-1983

Reference Instruments and/or Sources: S-394/1122 1131 781 059 280 60646
Cs-137 Gamma S/N 1162 G112 M565 5105 T1008 T879 E552 E551 720 734 1616 Neutron Am-241 Be S/N T-304
 Alpha S/N Pu239sn:8744 Beta S/N Tc99sn:5280-04, Sr90y90sn: 4016 Other
 m 500 S/N 50800 Oscilloscope S/N Multimeter S/N 83990502

Calibrated By: Charles Smith Date 15 Feb 10
Reviewed By: Rhank Hain Date 15 Feb 10

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AC Inst. Passed Dielectric (Hi-Pot) and Continuity Test
Only Failed



Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data

Detector 43-68 Serial No. PR-177646 Order # 20147695/346446
 Customer MILLENNIUM SERVICES INC
 Counter 2221 Serial No. 148451 Counter Input Sensitivity 5 ~~Comments~~ ⁵ mV
 Count Time 1 minute Distance Source to Detector Surface
 Other Calibrated w/ 5' cable

High Voltage	Background	Isotope Pu 239 Size 186000 cpm	Isotope Tc 99 Size 58300 cpm	Isotope Size	Isotope Size
1100	2	82317			
1150	3	85184			
1200	1	86384			
- 1250	5	86242			
1300	3	87369			
1350	4	87776			
1400	8	88139			
1550	95		23104		
1600	185		30445		
- 1650	312		34094		
1700	382		34480		
1750	452		35461		

Gas proportional detector count rate decreased \leq 10% after 15 hour static test using 39" cable.

Signature Charles Disk Date 15 Feb 10

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCCL Z540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1003

Instrument Type	2121				
Instrument Serial Number	148451				
Probe Type	43-68				
Probe Serial Number	177646				
Operating Voltages (α/β)	1250/1650				
Threshold	50				
Date	10/8/2010				
	Isotope	Instrument Efficiency (ε _i)	Surface Eff. (ε _s)	Fraction(f)	Total Efficiency (ε _t)
1	Th-230	39%	0.25		10%
2	C-14	42%	0.25		10%
3	Tc-99	35%	0.25		9%
4	Tl-204	47%	0.5		23%
5	Sr-90	44%	0.5		22%

Isotope	Th-230	C-14	Tc-99	Tl-204	Sr-90
Serial Number	D7-928	D7-934	A7-132	A7-134	A7-135
Emission Type	Alpha	Beta	Beta	Beta	Beta
Half Life	75000	5730	213000	3.78	28.5
Assay Date	12/1/2006	12/1/2006	8/15/2002	8/7/2002	8/7/2002
q_{2π} Emission Rate	37490	52040	28170	24870	53150
Decay Corrected q_{2π} Emission Rate	37489	52016	28169	5554	43566
Probe Coverage Percent	88%	88%	88%	88%	88%
Adjusted Emission Rate	32990	45774	24789	4888	38338
Measurement 1	12212	19053	8485	2246	17191
Measurement 2	12310	19103	8640	2334	16992
Measurement 3	12212	18595	8587	2270	17115
Measurement 4	12194	19077	8740	2371	17160
Measurement 5	12382	18998	8478	2264	16725
Measurement 6	12373	18860	8590	2310	16953
Measurement 7	12196	19000	8605	2272	16764
Measurement 8	12338	19214	8595	2284	16649
Measurement 9	12446	19032	8534	2316	16739
Measurement 10	12420	19173	8580	2346	16823
Measurement 11	12204	19029	8740	2304	16657
Measurement 12	12270	18921	8650	2297	16488
Measurement 13	12194	19181	8441	2303	16587
Measurement 14	12131	19160	8530	2347	16478
Measurement 15	11945	19179	8652	2323	16399
Measurement 16	12360	19173	8556	2321	16470
Measurement 17	12329	19072	8557	2324	16571
Measurement 18	12476	19075	8717	2265	16721
Measurement 19	12338	19086	8614	2327	16347
Measurement 20	12258	18919	8676	2304	16196
Mean of Measurements	12279.4	19045	8598.35	2306.4	16701.25
Efficiency	37%	42%	35%	47%	44%



Designer and Manufacturer
of
Scientific and Industrial
Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-46.
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER MILLENNIUM SERVICES INC

ORDER NO. 20147695/346446

Mfg. Ludlum Measurements, Inc. Model 2221 Serial No. 190181

Mfg. Ludlum Measurements, Inc. Model 44-9 Serial No. PR-169468

Cal. Date 15-Feb-10 Cal Due Date 15-Feb-11 Cal. Interval 1 Year Meterface 202-159

Check mark Applies to applicable instr. and/or detector IAW mfg. spec. T. 75 °F RH 20 % Alt 698.8 mm Hg

New Instrument Instrument Received Within Toler. $\pm 10\%$ 10-20% Out of Tol. Requiring Repair Other-See comments

Mechanical ck. Meter Zeroed Background Subtract Input Sens. Linearity

F/S Resp. ck. Reset ck. Window Operation Geotropism

Audio ck. Alarm Setting ck. Batt. ck. (Min. Volt) 4.4 VDC

Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set Comments V Input Sens. Comments mV Det. Oper. Comments V at Comments mV Threshold Dial Ratio 100 = 10 mV

HV Readout (2 points) Ref./Inst. 500 / 500 V Ref./Inst. 2000 / 2001 V

COMMENTS:

Probe: 44-9 43-68 (Alpha) 43-68 (Beta) instrument is currently set for 44-9 operation.
Highvoltage: 900v 1200v 1650v
Millivoltage: 600 (60mv) 50 (5mv) 50 (5mv)
window: 100 100 100
window position: off off off
Window @ 100 = 1.5 times threshold.
Calibrated with a 5' cable.
See attachment for efficiencies.
Firmware# 26 10 10

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*	
X 1K	400kcpm	N/A	400	
X 1K	100kcpm	⚡	100	
X 100	40kcpm		400	
X 100	10kcpm		100	
X 10	4kcpm		400	
X 10	1kcpm		100	
X 1	400cpm		400	
X 1	100cpm		100	

*Uncertainty within $\pm 10\%$ C.F. within $\pm 20\%$

ALL Range(s) Calibrated Electronically

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	Log Scale	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
400kcpm	N/A	37740 (0)	⚡	500kcpm	N/A	500K cpm
40kcpm	⚡	3774		50kcpm	⚡	50K
4kcpm		397		5kcpm		5K
400cpm		40		500cpm		500
40cpm		4		50cpm		50

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCCL Z540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: S-394/1122 1131 781 059 280 60646

Cs-137 Gamma S/N 1192 G112 M565 5105 T1008 T879 E552 E551 720 734 1616 Neutron Am-241 Be S/N T-304

Alpha S/N Pu239sn 8744 Beta S/N Tc99sn:5280-04, Sr90y90sn: 4016 Other

m 500 SiN 50800 Oscilloscope S/N Multimeter S/N 83990502

Calibrated By: Charles Disk Date 15 Feb 10

Reviewed By: Richard Ham Date 15 Feb 10

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AC Inst. Passed Dielectric (Hi-Pot) and Continuity Test
Only Failed



Designer and Manufacturer
of
Scientific and Industrial
Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data

Detector 43-68 Serial No. PR-149768 Order # 20147695/346446
 Customer MILLENNIUM SERVICES INC
 Counter 2221 Serial No. 190181 Counter Input Sensitivity 5 ^{CS} ~~Comments~~ mV
 Count Time 1 minute Distance Source to Detector Surface
 Other Calibrated w/5' cable

High Voltage	Background	Isotope Pu 239 Size	Isotope Tc 99 Size	Isotope Size	Isotope Size
1100	0	84504			
1150	1	88213			
- 1200	3	89848			
1250	2	90166			
1300	3	90274			
1350	2	90493			
1400	10	91252			
1600	152		29757		
1650	293		34771		
1700	365		35574		
1750	403		36395		

Gas proportional detector count rate decreased ≤ 10% after 15 hour static test using 39" cable.

Signature Charles Dick Date 15 Feb 10

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1903

Instrument Type	2121				
Instrument Serial Number	190181				
Probe Type	43-68				
Probe Serial Number	149768				
Operating Voltages (α/β)	1200/1650				
Threshold	50				
Date	10/8/2010				
	Isotope	Instrument Efficiency (ϵ_i)	Surface Eff. (ϵ_s)	Fraction(f)	Total Efficiency (ϵ_t)
1	Th-230	37%	0.25		9%
2	C-14	41%	0.25		10%
3	Tc-99	33%	0.25		8%
4	Tl-204	43%	0.5		22%
5	Sr-90	39%	0.5		19%

Isotope	Th-230	C-14	Tc-99	Tl-204	Sr-90
Serial Number	D7-928	D7-934	A7-132	A7-134	A7-135
Emission Type	Alpha	Beta	Beta	Beta	Beta
Half Life	75000	5730	213000	3.78	28.5
Assay Date	12/1/2006	12/1/2006	8/15/2002	8/7/2002	8/7/2002
q_{2π} Emission Rate	37490	52040	28170	24870	53150
Decay Corrected q_{2π} Emission Rate	37489	52016	28169	5554	43566
Probe Coverage Percent	88%	88%	88%	88%	88%
Adjusted Emission Rate	32990	45774	24789	4888	38338
Measurement 1	12060	18814	8320	2150	14770
Measurement 2	12273	18710	8406	2081	14674
Measurement 3	12382	18801	8452	2165	15057
Measurement 4	12136	18807	8221	2047	14788
Measurement 5	12323	18750	8096	2008	15019
Measurement 6	12215	18677	8288	2190	15079
Measurement 7	12249	18733	8531	2077	15230
Measurement 8	12298	18727	8178	2096	14989
Measurement 9	12323	18769	7920	2112	14705
Measurement 10	12280	18752	8055	2141	14814
Measurement 11	12229	18645	8271	2067	14909
Measurement 12	12265	18654	8004	2100	15102
Measurement 13	12263	18925	8279	2113	15015
Measurement 14	12246	18757	7988	2160	14914
Measurement 15	12300	18403	8041	2050	14814
Measurement 16	12282	18830	8193	1996	14676
Measurement 17	12063	18634	8080	2224	14943
Measurement 18	12276	18749	8210	2124	14709
Measurement 19	12324	19047	8102	2042	14829
Measurement 20	12072	18906	7983	2089	14817
Mean of Measurements	12242.95	18754.5	8180.9	2101.6	14892.65
Efficiency	37%	41%	33%	43%	39%



Designer and Manufacturer
of
Scientific and Industrial
Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER MILLENNIUM SERVICES ORDER NO. 20147711/346456
Mfg. Ludlum Measurements, Inc. Model 2929 Serial No. 163817
Mfg. Ludlum Measurements, Inc. Model 43-10-1 Serial No. PR 167232
Cal. Date 3-Feb-10 Cal Due Date 3-Feb-11 Cal. Interval 1 Year Meterface 202-014

Check mark applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 36 % Alt 698.8 mm Hg
 New Instrument Instrument Received Within Toler. +10% 10-20% Out of Tol. Requiring Repair Other-See comments
 Mechanical ck. Window Operation
 Audio ck.
 Meter Zeroed Alpha Sensitivity 175 mV Beta Sensitivity 4 mV Beta Window 50 mV
 Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

Instrument Volt Set 750 V = 2.92 on High Voltage dial. High Voltage set with detector connected.
 HV Readout (2 points) Ref./Inst. 500 / 500 V Ref./Inst. 2000 / 1999 V

COMMENTS:

P0239 Size: 24600dpm counts: 10057cpm Cs137 Size: 6475dpm counts: 2153cpm
Bckgrnd: 0cpm 4P: EFF: 40.88% Bckgrnd: 77cpm 4P: EFF: 32.06%
SrY90 Size: 104607dpm counts: 48482cpm
Bckgrnd: 77cpm 4P: EFF: 46.27%

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

Alpha Channel Digital Readout	REFERENCE CAL POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
	<u>400K cpm</u>	<u>39962 (0)</u>	<u>39962 (0)</u>
	<u>40K cpm</u>	<u>3996</u>	<u>3996</u>
	<u>4K cpm</u>	<u>399</u>	<u>399</u>
	<u>400 cpm</u>	<u>40</u>	<u>40</u>
	<u>40 cpm</u>	<u>4</u>	<u>4</u>

Beta/Gamma Channel Digital Readout	REFERENCE CAL POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
	<u>400K cpm</u>	<u>39962 (0)</u>	<u>39962 (0)</u>
	<u>40K cpm</u>	<u>3996</u>	<u>3996</u>
	<u>4K cpm</u>	<u>399</u>	<u>399</u>
	<u>400 cpm</u>	<u>40</u>	<u>40</u>
	<u>40 cpm</u>	<u>4</u>	<u>4</u>

*Uncertainty within ± 10% C.F. within ± 20%

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL 2540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: S-394/1122 1131 781 059 280 60646
Cs-137 Gamma S/N 1162 G112 M565 5105 11008 1879 E552 E551 720 734 1616 Neutron Am-241 Be S/N T-304
 Alpha S/N Pu239 SN:5283 Beta S/N SrY90 SN:5281 Other Cs137 SN:158-112
 m 500 S/N 190566 Oscilloscope S/N Multimeter S/N 86250390

Calibrated By: Jaron Fle Date 3-FEB-10
Reviewed By: Rhank Hamis Date 3 Feb 10

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FORM C25 10/15/2008

AC Inst. Passed Dielectric (Hi-Pot) and Continuity Test
Only Failed:



Designer and Manufacturer
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Instruments

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

Bench Test Data For Detector

Detector 43-10-1 Serial No. PR167232 Order #. 20147711/346456
 Customer MILLENNIUM SERVICES Alpha Input Sensitivity 175 mV
 Counter 2929 Serial No. 163817 Beta Input Sensitivity 4 mV
 Count Time 1Minute Beta Window 50 mV
 Other _____ Distance Source to Detector TRAY

High Voltage	Background		Isotope <u>Po239</u> Size <u>24600dpm</u>		Isotope <u>Sr90</u> Size <u>104607dpm</u>		Isotope <u>Cs137</u> Size <u>6475dpm</u>	
	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
700	0	73	9744	206	1	46804	0	1864
725	0	73	9858	218	2	48402	1	2005
750	0	77	10057	222	8	48482	1	2153
775	0	75	10136	235	33	47265	0	2126
800	6	77	10213	266	100	44954	0	2087

- Gas Proportional detector count rate decreased \leq 10% after 15 hour static test using 39" cable.
- Gas proportional detector count rate decreased \leq 10% after 5 hour static test using 39" cable and alpha/beta counter.

Signature Jaron Fla Date 3-Feb-10



Designer and Manufacturer
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Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
POST OFFICE BOX 810 PH. 325-235-5494
501 OAK STREET FAX NO. 325-235-4672
SWEETWATER, TEXAS 79556, U.S.A.

CUSTOMER MILLENNIUM SERVICES ORDER NO. 20147711/346456
Mfg. Ludlum Measurements, Inc. Model 19 Serial No. 142858
Mfg. _____ Model _____ Serial No. _____
Cal. Date 3-Feb-10 Cal Due Date 3-Feb-11 Cal. Interval 1 Year Meterface 202-016

Check mark applies to applicable instr. and/or detector IAW mfg. spec. T. 73 °F RH 36 % Alt 698.8 mm Hg
 New Instrument Instrument Received Within Toler. +10% 10-20% Out of Tol. Requiring Repair Other-See comments
 Mechanical ck. Meter Zeroed Background Subtract Input Sens. Linearity
 F/S Resp. ck. Reset ck. Window Operation Geotropism
 Audio ck. Alarm Settling ck. Batt. ck. (Min. Volt) 2.2 VDC
 Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.
 Instrument Volt Set 600 V Input Sens. 37 mV Det. Oper. _____ V at _____ mV Threshold Dial Ratio _____ = _____ mV
 HV Readout (2 points) Ref./Inst. _____ / _____ V Ref./Inst. _____ / _____ V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
5000	4000 uR/hr	3800	4000
5000	1000 uR/hr	950	1000
500	400 uR/hr = 73000 cpm	400	400
500	100 uR/hr	100	100
250	200 uR/hr = 36000 cpm	190	200
250	100 uR/hr	95	100
50	7300 cpm	40	40
50	1820 cpm	10	10
25	3600 cpm	20	20
25	900 cpm	5	5

*Uncertainty within ± 10% C.F. within ± 20%

50, 25 Range(s) Calibrated Electronically

REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*	Log Scale	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
Digital Readout						

Ludlum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of other International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. The calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978. State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: S-394/1122 1131 781 059 280 60646
 Cs-137 Gamma S/N 1162 G112 M565 5105 T1008 T879 E552 E551 720 734 1616 Neutron Am-241 Be S/N T-304
 Alpha S/N _____ Beta S/N _____ Other _____
 m 500 S/N 190566 Oscilloscope S/N _____ Multimeter S/N 86250390

Calibrated By: Jason Fle Date 3-Feb-10
 Reviewed By: Shank Hain Date 3 Feb 10

APPENDIX D
ALAMEDA POINT RADIATION SURVEY METHODS: SURFACE CONTAMINATION
MONITOR SURVEYS SUPPORTED BY HAND-HELD INSTRUMENTATION (ON CD)

**ALAMEDA POINT
RADIOLOGICAL SURVEY METHODS:
SURFACE CONTAMINATION MONITOR SURVEYS
SUPPORTED BY HAND-HELD INSTRUMENTATION**

April 2012

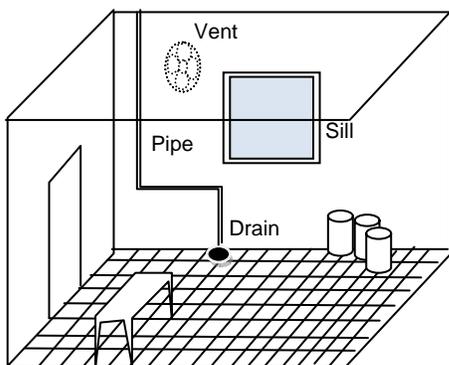
Prepared By:

**Richard W. Dubiel, CHP
Millennium Services, Inc
222 Creekstone Ridge
Woodstock, GA 30188**

The Surface Contamination Monitor (SCM) provides an effective and efficient approach to surveys of surfaces, both building interiors and exterior hard surfaces. The multi-phased approach maximizes the attributes of the SCM in both the dynamic (rolling; see [photographs 1 through 5](#)) and static (stamp; see [photographs 6 and 7](#)) modes as supplemented by smaller hand-held detectors. To demonstrate the approach, the following describes a typical process used to maximize both the efficiency of the SCM and to optimize the quality of surveys performed by the SCM and hand-held instruments. An interior room containing some materials from operational activities that requires a Class 1 survey is used as an example. The requirements of a Class 1 survey are that 100 percent of the floor and walls up to 6 feet must be surveyed.

Initial Condition

Major equipment and materials are moved to allow surveying in the areas. Items and materials remain that cover the room surfaces while radioactive material was used. As shown in the drawing, a table, several small drums, and tile flooring must be removed before the survey begins. If possible, the pipe, window sill, and vent cover could be removed to provide a smooth survey surface. In many cases, the tile flooring and mastic will be asbestos-containing materials (ACM) and must be removed by an asbestos abatement contractor. Removal of systems such as piping, electrical conduit, lighting, and air vents must address the required “as left” condition and ensure that systems to be removed

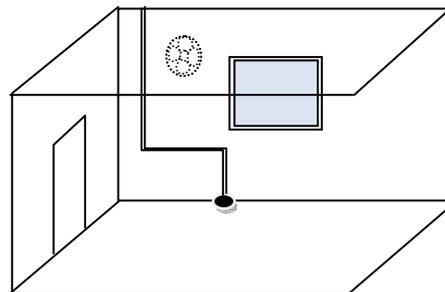


are isolated and in a safe condition for removal. Consideration must be given to the potential for materials to be radioactively contaminated. Pre-removal surveys, including loose and fixed contamination surveys, may be required to establish worker protection requirements and appropriate disposal methods.

are isolated and in a safe condition for removal. Consideration must be given to the potential for materials to be radioactively contaminated. Pre-removal surveys, including loose and fixed contamination surveys, may be required to establish worker protection requirements and appropriate disposal methods.

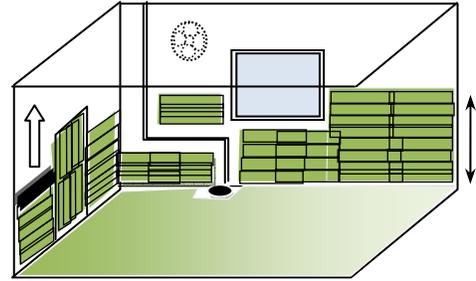
Conditions after Abatement

The goal of the equipment removal and ACM abatement process is to optimize the efficiency and effectiveness of the survey while maintaining the desired post-survey conditions. In the drawing, the table, small drums, and tile flooring have been removed. However, based on the expected reuse of the facility after free release, the drain piping, window sill, and vent fan remain. The room provides a reasonable facility for a final status survey on the original building surfaces.



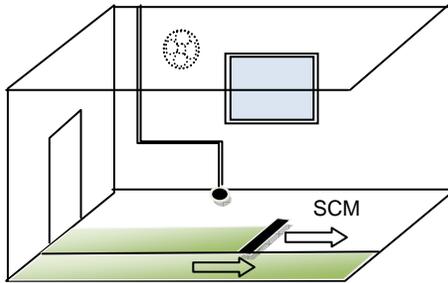
Measurement Survey of Floor Using SCM

The most productive mode of operation of the SCM is the dynamic mode. Initial surveys in any area will be performed on surfaces that are easily rolled. These surfaces must be flat and have little or no obstructions. Floors offer the best opportunity for dynamic mode. Before floor surveys are performed, chalk lines are snapped at detector width intervals to guide the SCM operator and ensure that survey strips are seamless ([Photograph 1](#)). Floors surveys with the SCM will typically scan a large portion of the floor, 90 or more. Obstacles like the drain pipe will limit surveying by the SCM and are marked for survey by other means. If flat, unrestricted wall or ceiling areas exist, the dynamic mode of the SCM can be used on those surfaces. [Photographs 2 through 5](#) show the operation of the SCM on other surfaces.



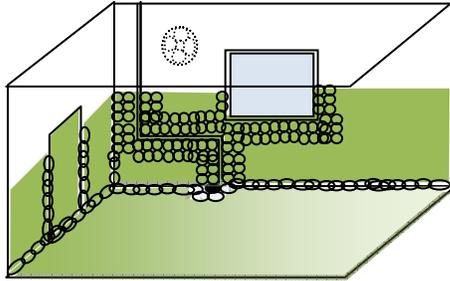
Static Measurement Survey of Walls

Areas that cannot be rolled with the SCM are evaluated for survey with the SCM in the static mode. The static mode of the SCM is the second most productive means of survey and maintains the same level of quality of data analysis as the dynamic mode. Some floor areas, such as the edge along the walls, and many wall surfaces not surveyed with the SCM in the dynamic mode are typically surveyed with static measurements; see diagram. As static measurements are taken on surfaces, the location of the detector is marked and the SCM strip number is logged on the surface, allowing for ease of location if elevated readings are discovered. The diagram provides an example of where static measurements are obtained on the walls of the example room. Areas that are not surveyed in dynamic or static mode with the large SCM detectors are marked for survey with small hand held detectors. [Photographs 6 and 7](#) show typical static surveys.



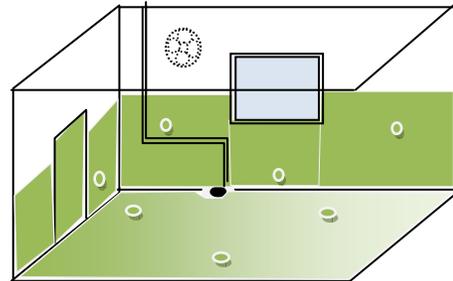
Hand-Held Instrument Probe Survey of Gaps

Hand-held instrument probes, 100 square centimeter (cm²) or 20 cm², present the least productive means of surveying surfaces but are necessary in small areas that are not surveyed by dynamic or static survey methods. A high-quality, hand-held survey can be maintained when surveys are conducted over small areas. Maintaining proper survey speed and source to detector distance is most achievable when the area to be surveyed is reasonably small. The overall survey approach has been to maximize the amount of surface surveyed with the SCM, leaving small areas where the small detector surveys are effective; see diagram. Hand-held detector surveys are used to complete the survey. Documentation of hand-held surveys is recorded on survey sheets separate from the computerized data files of the SCM.

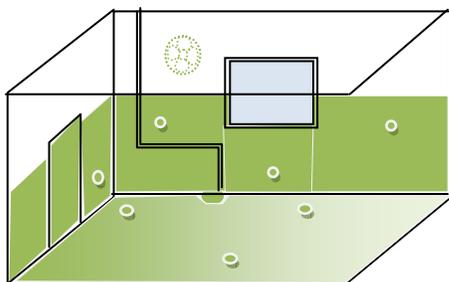


Fixed-Point Measurements

As required by the survey plan, fixed point measurements are taken on a certain number of exposed surfaces. Fixed point measurements are performed for alpha, beta and gamma isotopes and well as swipe surveys to evaluate compliance with removable activity criteria. The number of fixed-point locations is selected in accordance with guidance provided in the Multi-Agency Radiological Survey and Site Investigation Manual (MARSSIM – NUREG 1575). Specific fixed-point measurement locations are selected through use of computer codes that develop triangular grid patterns based on a random start location. The diagram above identifies typical fixed measurement locations on the Class 1 lower walls and floors. Additional fixed-point measurement locations would be identified on the Class 2 upper walls and ceilings. [Photograph 8 and 9](#) show technicians performing fixed measurements at identified fixed measurement locations.



Drain and Vent Survey/Sampling

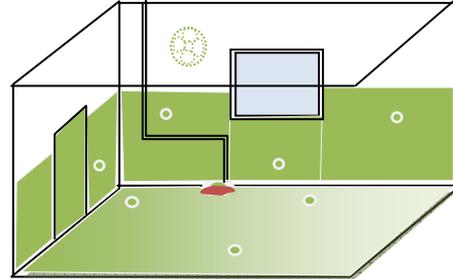


After surface surveys have been completed, potential pathways for the release of radioactive materials such as drains and vents are identified. Drains are inspected for the existence of

sediment. If available, sediment is collected and submitted for on- or off-site laboratory analysis. Swipe surveys of the drain piping are obtained to determine the existence of removable contamination. Vents or exhaust ducts are surveyed with both direct measurements and swipes surveys to evaluate the existence of removable contamination or if they represent a potential release path.

Dose Assessment, Analysis and Reporting

After all surveys and sampling have been completed, final analysis of the data is performed to evaluate compliance with the release criteria or identify areas that exceed release criteria. Areas in excess of release criteria are identified and marked in the field for ease of location for future remedial actions and resurvey. Data from all surveys and samples are compiled to perform calculations to assess dose consequences and generate characterization or final status reports. The diagram indicates an example of compliance with release criteria achieved on all surfaces but the drain. Area identified above the release criteria are posted as a radiologically controlled area.





Photograph 1
Floor chalk Lines



Photograph 2
SCM Floor Survey



Photograph 3
SCM Survey on Asphalt



Photograph 4
SCM Rolling Wall Survey



Photograph 5
SCM Rolling Ceiling Survey



Photograph 6
SCM Stamp on Wall



Photograph 7
SCM Stamp on Ceiling



Photograph 8
Fixed-Point Measurement on Wall



Photograph 9
Fixed-Point Measurement on Floor

APPENDIX E
DIRECT SURVEY DATA (ON CD)

Building	5
Survey Unit	1 - floor
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	6	n/a	50.51	n/a
2	Concrete	1.3	n/a	2	n/a	7.52	n/a
3	Concrete	1.3	n/a	3	n/a	18.27	n/a
4	Concrete	1.3	n/a	9	n/a	82.75	n/a
5	Concrete	1.3	n/a	7	n/a	61.25	n/a
6	Concrete	1.3	n/a	4	n/a	29.02	n/a
7	Concrete	1.3	n/a	3	n/a	18.27	n/a
8	Concrete	1.3	n/a	2	n/a	7.52	n/a
9	Concrete	1.3	n/a	5	n/a	39.76	n/a
10	Concrete	1.3	n/a	6	n/a	50.51	n/a
11	Concrete	1.3	n/a	3	n/a	18.27	n/a
12	Concrete	1.3	n/a	5	n/a	39.76	n/a
13	Concrete	1.3	n/a	5	n/a	39.76	n/a
14	Concrete	1.3	n/a	5	n/a	39.76	n/a
15	Concrete	1.3	n/a	3	n/a	18.27	n/a
16	Concrete	1.3	n/a	4	n/a	29.02	n/a
17	Concrete	1.3	n/a	4	n/a	29.02	n/a
Action Level						100	n/a

Building	5
Survey Unit	1 - Walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.4	n/a	4	n/a	27.94	n/a
19	Steel	1.6	n/a	5	n/a	36.54	n/a
20	Steel	1.6	n/a	4	n/a	25.79	n/a
21	Steel	1.6	n/a	3	n/a	15.05	n/a
22	Drywall	1.4	n/a	3	n/a	17.19	n/a
23	Drywall	1.4	n/a	4	n/a	27.94	n/a
23	Drywall	1.4	n/a	3	n/a	17.19	n/a
25	Drywall	1.4	n/a	3	n/a	17.19	n/a
25	Drywall	1.4	n/a	4	n/a	27.94	n/a
27	Drywall	1.4	n/a	5	n/a	38.69	n/a
28	Glass	1.5	n/a	4	n/a	26.87	n/a
29	Drywall	1.4	n/a	5	n/a	38.69	n/a
30	Steel	1.6	n/a	4	n/a	25.79	n/a
31	Drywall	1.4	n/a	3	n/a	17.19	n/a
32	Steel	1.6	n/a	4	n/a	25.79	n/a
33	Steel	1.6	n/a	4	n/a	25.79	n/a
34	Steel	1.6	n/a	4	n/a	25.79	n/a
				Action Level		100	n/a

Building	5
Survey Unit	1 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	3/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Drywall	1.4	n/a	3	n/a	17.19	n/a
36	Drywall	1.4	n/a	4	n/a	27.94	n/a
37	Drywall	1.4	n/a	4	n/a	27.94	n/a
38	Drywall	1.4	n/a	3	n/a	17.19	n/a
39	Drywall	1.4	n/a	4	n/a	27.94	n/a
40	Drywall	1.4	n/a	3	n/a	17.19	n/a
41	Drywall	1.4	n/a	3	n/a	17.19	n/a
42	Drywall	1.4	n/a	3	n/a	17.19	n/a
43	Drywall	1.4	n/a	4	n/a	27.94	n/a
44	Drywall	1.4	n/a	4	n/a	27.94	n/a
45	Drywall	1.4	n/a	3	n/a	17.19	n/a
46	Drywall	1.4	n/a	4	n/a	27.94	n/a
47	Steel	1.4	n/a	5	n/a	38.69	n/a
48	Drywall	1.4	n/a	4	n/a	27.94	n/a
49	Steel	1.6	n/a	3	n/a	15.05	n/a
50	Steel	1.6	n/a	3	n/a	15.05	n/a
51	Steel	1.6	n/a	3	n/a	15.05	n/a
				Action Level		100	n/a

Building	5
Survey Unit	2 - walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	3	n/a	17.19	n/a
2	Drywall	1.4	n/a	2	n/a	6.45	n/a
3	Drywall	1.4	n/a	3	n/a	17.19	n/a
4	Drywall	1.4	n/a	2	n/a	6.45	n/a
5	Drywall	1.4	n/a	3	n/a	17.19	n/a
6	Drywall	1.4	n/a	3	n/a	17.19	n/a
7	Drywall	1.4	n/a	2	n/a	6.45	n/a
8	Drywall	1.4	n/a	2	n/a	6.45	n/a
9	Drywall	1.4	n/a	3	n/a	17.19	n/a
10	Wood	1.7	n/a	4	n/a	24.72	n/a
11	Drywall	1.4	n/a	4	n/a	27.94	n/a
12	Drywall	1.4	n/a	5	n/a	38.69	n/a
13	Drywall	1.4	n/a	3	n/a	17.19	n/a
14	Drywall	1.4	n/a	5	n/a	38.69	n/a
15	Drywall	1.4	n/a	6	n/a	49.43	n/a
16	Drywall	1.4	n/a	4	n/a	27.94	n/a
17	Drywall	1.4	n/a	4	n/a	27.94	n/a
				Action Level		100	n/a

Building	5
Survey Unit	2 - floor
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.3	n/a	3	n/a	18.27	n/a
19	Concrete	1.3	n/a	12	n/a	114.99	n/a
20	Concrete	1.3	n/a	8	n/a	72.00	n/a
21	Concrete	1.3	n/a	2	n/a	7.52	n/a
22	Concrete	1.3	n/a	3	n/a	18.27	n/a
23	Concrete	1.3	n/a	4	n/a	29.02	n/a
24	Concrete	1.3	n/a	7	n/a	61.25	n/a
25	Concrete	1.3	n/a	6	n/a	50.51	n/a
26	Concrete	1.3	n/a	5	n/a	39.76	n/a
27	Concrete	1.3	n/a	5	n/a	39.76	n/a
28	Concrete	1.3	n/a	9	n/a	82.75	n/a
29	Concrete	1.3	n/a	6	n/a	50.51	n/a
30	Concrete	1.3	n/a	5	n/a	39.76	n/a
31	Concrete	1.3	n/a	4	n/a	29.02	n/a
32	Concrete	1.3	n/a	2	n/a	7.52	n/a
33	Concrete	1.3	n/a	3	n/a	18.27	n/a
34	Concrete	1.3	n/a	6	n/a	50.51	n/a
Action Level						100	n/a

Building	5
Survey Unit	2 - Overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	3/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Drywall	1.4	n/a	4	n/a	27.94	n/a
36	Drywall	1.4	n/a	3	n/a	17.19	n/a
37	Steel	1.6	n/a	4	n/a	25.79	n/a
38	Drywall	1.4	n/a	4	n/a	27.94	n/a
39	Drywall	1.4	n/a	5	n/a	38.69	n/a
40	Steel	1.6	n/a	4	n/a	25.79	n/a
41	Drywall	1.4	n/a	4	n/a	27.94	n/a
42	Drywall	1.4	n/a	3	n/a	17.19	n/a
43	Drywall	1.4	n/a	3	n/a	17.19	n/a
44	Drywall	1.4	n/a	4	n/a	27.94	n/a
45	Concrete	1.3	n/a	4	n/a	29.02	n/a
46	Concrete	1.3	n/a	5	n/a	39.76	n/a
47	Concrete	1.3	n/a	5	n/a	39.76	n/a
48	Concrete	1.3	n/a	4	n/a	29.02	n/a
49	Concrete	1.3	n/a	3	n/a	18.27	n/a
50	Concrete	1.3	n/a	4	n/a	29.02	n/a
51	Concrete	1.3	n/a	4	n/a	29.02	n/a
				Action Level		100	n/a

Building	5
Survey Unit	3 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	2	n/a	6.45	n/a
2	Wood	1.7	n/a	2	n/a	3.22	n/a
3	Drywall	1.4	n/a	3	n/a	17.19	n/a
4	Wood	1.7	n/a	2	n/a	3.22	n/a
5	Drywall	1.4	n/a	3	n/a	17.19	n/a
6	Drywall	1.4	n/a	2	n/a	6.45	n/a
7	Wood	1.7	n/a	2	n/a	3.22	n/a
8	Drywall	1.4	n/a	3	n/a	17.19	n/a
9	Drywall	1.4	n/a	4	n/a	27.94	n/a
10	Concrete	1.3	n/a	6	n/a	50.51	n/a
11	Concrete	1.3	n/a	3	n/a	18.27	n/a
12	Concrete	1.3	n/a	3	n/a	18.27	n/a
13	Concrete	1.3	n/a	2	n/a	7.52	n/a
14	Concrete	1.3	n/a	3	n/a	18.27	n/a
15	Concrete	1.3	n/a	4	n/a	29.02	n/a
16	Concrete	1.3	n/a	5	n/a	39.76	n/a
17	Concrete	1.3	n/a	4	n/a	29.02	n/a
				Action Level		100	n/a

Building	5
Survey Unit	3 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/6/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.4	n/a	3	n/a	17.19	n/a
19	Drywall	1.4	n/a	4	n/a	27.94	n/a
20	Drywall	1.4	n/a	4	n/a	27.94	n/a
21	Drywall	1.4	n/a	2	n/a	6.45	n/a
22	Drywall	1.4	n/a	2	n/a	6.45	n/a
23	Drywall	1.4	n/a	3	n/a	17.19	n/a
24	Drywall	1.4	n/a	6	n/a	49.43	n/a
25	Drywall	1.4	n/a	3	n/a	17.19	n/a
26	Drywall	1.4	n/a	3	n/a	17.19	n/a
27	Wood	1.7	n/a	3	n/a	13.97	n/a
28	Drywall	1.4	n/a	2	n/a	6.45	n/a
29	Drywall	1.4	n/a	8	n/a	70.93	n/a
30	Concrete	1.3	n/a	4	n/a	29.02	n/a
31	Concrete	1.3	n/a	5	n/a	39.76	n/a
32	Concrete	1.3	n/a	2	n/a	7.52	n/a
33	Concrete	1.3	n/a	3	n/a	18.27	n/a
34	Concrete	1.3	n/a	1	n/a	-3.22	n/a
				Action Level		100	n/a

Building	5
Survey Unit	4 - walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/22/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	2	n/a	6.45	n/a
2	Drywall	1.4	n/a	4	n/a	27.94	n/a
3	Drywall	1.4	n/a	2	n/a	6.45	n/a
4	Drywall	1.4	n/a	3	n/a	17.19	n/a
5	Drywall	1.4	n/a	4	n/a	27.94	n/a
6	Drywall	1.4	n/a	6	n/a	49.43	n/a
7	Drywall	1.4	n/a	4	n/a	27.94	n/a
8	Steel	1.6	n/a	3	n/a	15.05	n/a
9	Concrete	1.3	n/a	3	n/a	18.27	n/a
10	Concrete	1.3	n/a	5	n/a	39.76	n/a
11	Drywall	1.4	n/a	2	n/a	6.45	n/a
12	Drywall	1.4	n/a	1	n/a	-4.30	n/a
13	Drywall	1.4	n/a	2	n/a	6.45	n/a
14	Drywall	1.4	n/a	3	n/a	17.19	n/a
15	Drywall	1.4	n/a	4	n/a	27.94	n/a
16	Concrete	1.3	n/a	5	n/a	39.76	n/a
17	Concrete	1.3	n/a	2	n/a	7.52	n/a
				Action Level		100	n/a

Building	5
Survey Unit	4 - floors
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/22/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.3	n/a	4	n/a	29.02	n/a
19	Concrete	1.3	n/a	4	n/a	29.02	n/a
20	Concrete	1.3	n/a	5	n/a	39.76	n/a
21	Concrete	1.3	n/a	6	n/a	50.51	n/a
22	Concrete	1.3	n/a	4	n/a	29.02	n/a
23	Concrete	1.3	n/a	4	n/a	29.02	n/a
24	Concrete	1.3	n/a	4	n/a	29.02	n/a
25	Concrete	1.3	n/a	3	n/a	18.27	n/a
26	Concrete	1.3	n/a	2	n/a	7.52	n/a
27	Concrete	1.3	n/a	4	n/a	29.02	n/a
28	Concrete	1.3	n/a	2	n/a	7.52	n/a
29	Concrete	1.3	n/a	2	n/a	7.52	n/a
30	Concrete	1.3	n/a	3	n/a	18.27	n/a
31	Concrete	1.3	n/a	5	n/a	39.76	n/a
32	Concrete	1.3	n/a	4	n/a	29.02	n/a
33	Concrete	1.3	n/a	2	n/a	7.52	n/a
34	Concrete	1.3	n/a	4	n/a	29.02	n/a
				Action Level		100	n/a

Building	5
Survey Unit	4 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/6/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Drywall	1.4	n/a	2	n/a	6.45	n/a
36	Drywall	1.4	n/a	3	n/a	17.19	n/a
37	Drywall	1.4	n/a	3	n/a	17.19	n/a
38	Drywall	1.4	n/a	6	n/a	49.43	n/a
39	Drywall	1.4	n/a	1	n/a	-4.30	n/a
40	Drywall	1.4	n/a	3	n/a	17.19	n/a
41	Drywall	1.4	n/a	2	n/a	6.45	n/a
42	Drywall	1.4	n/a	4	n/a	27.94	n/a
43	Drywall	1.4	n/a	2	n/a	6.45	n/a
44	Drywall	1.4	n/a	1	n/a	-4.30	n/a
45	Concrete	1.3	n/a	3	n/a	18.27	n/a
46	Concrete	1.3	n/a	2	n/a	7.52	n/a
47	Concrete	1.3	n/a	3	n/a	18.27	n/a
48	Concrete	1.3	n/a	2	n/a	7.52	n/a
49	Concrete	1.3	n/a	5	n/a	39.76	n/a
50	Concrete	1.3	n/a	6	n/a	50.51	n/a
51	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	5 - walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	6	n/a	49.43	n/a
2	Steel	1.6	n/a	2	n/a	4.30	n/a
3	Glass	1.5	n/a	3	n/a	16.12	n/a
4	Drywall	1.4	n/a	2	n/a	6.45	n/a
5	Glass	1.5	n/a	2	n/a	5.37	n/a
6	Drywall	1.4	n/a	3	n/a	17.19	n/a
7	Drywall	1.4	n/a	5	n/a	38.69	n/a
8	Drywall	1.4	n/a	5	n/a	38.69	n/a
9	Drywall	1.4	n/a	3	n/a	17.19	n/a
10	Drywall	1.4	n/a	2	n/a	6.45	n/a
11	Steel	1.6	n/a	3	n/a	15.05	n/a
12	Wood	1.7	n/a	4	n/a	24.72	n/a
13	Drywall	1.4	n/a	2	n/a	6.45	n/a
14	Steel	1.6	n/a	3	n/a	15.05	n/a
15	Drywall	1.4	n/a	3	n/a	17.19	n/a
16	Drywall	1.4	n/a	5	n/a	38.69	n/a
17	Drywall	1.4	n/a	3	n/a	17.19	n/a
				Action Level		100	n/a

Building	5
Survey Unit	5 - floors
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.3	n/a	2	n/a	7.52	n/a
19	Concrete	1.3	n/a	3	n/a	18.27	n/a
20	Concrete	1.3	n/a	3	n/a	18.27	n/a
21	Concrete	1.3	n/a	4	n/a	29.02	n/a
22	Concrete	1.3	n/a	4	n/a	29.02	n/a
23	Concrete	1.3	n/a	3	n/a	18.27	n/a
24	Concrete	1.3	n/a	4	n/a	29.02	n/a
25	Concrete	1.3	n/a	4	n/a	29.02	n/a
26	Concrete	1.3	n/a	3	n/a	18.27	n/a
27	Concrete	1.3	n/a	3	n/a	18.27	n/a
28	Concrete	1.3	n/a	4	n/a	29.02	n/a
29	Concrete	1.3	n/a	3	n/a	18.27	n/a
30	Concrete	1.3	n/a	2	n/a	7.52	n/a
31	Concrete	1.3	n/a	3	n/a	18.27	n/a
32	Concrete	1.3	n/a	3	n/a	18.27	n/a
33	Concrete	1.3	n/a	4	n/a	29.02	n/a
34	Concrete	1.3	n/a	3	n/a	18.27	n/a
Action Level						100	n/a

Building	5
Survey Unit	5 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/6/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Drywall	1.4	n/a	5	n/a	38.69	n/a
36	Drywall	1.4	n/a	2	n/a	6.45	n/a
37	Drywall	1.4	n/a	5	n/a	38.69	n/a
38	Drywall	1.4	n/a	2	n/a	6.45	n/a
39	Drywall	1.4	n/a	7	n/a	60.18	n/a
40	Drywall	1.4	n/a	4	n/a	27.94	n/a
41	Drywall	1.4	n/a	5	n/a	38.69	n/a
42	Drywall	1.4	n/a	3	n/a	17.19	n/a
43	Drywall	1.4	n/a	2	n/a	6.45	n/a
44	Drywall	1.4	n/a	4	n/a	27.94	n/a
45	Steel	1.6	n/a	2	n/a	4.30	n/a
46	Glass	1.5	n/a	2	n/a	5.37	n/a
47	Glass	1.5	n/a	3	n/a	16.12	n/a
48	Concrete	1.3	n/a	2	n/a	7.52	n/a
49	Concrete	1.3	n/a	2	n/a	7.52	n/a
50	Glass	1.5	n/a	4	n/a	26.87	n/a
51	Glass	1.5	n/a	3	n/a	16.12	n/a
52	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	6 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	3	n/a	17.19	n/a
2	Steel	1.6	n/a	5	n/a	36.54	n/a
3	Drywall	1.4	n/a	3	n/a	17.19	n/a
4	Drywall	1.4	n/a	5	n/a	38.69	n/a
5	Steel	1.6	n/a	3	n/a	15.05	n/a
6	Wood	1.7	n/a	2	n/a	3.22	n/a
7	Glass	1.5	n/a	2	n/a	5.37	n/a
8	Glass	1.5	n/a	2	n/a	5.37	n/a
9	Drywall	1.4	n/a	2	n/a	6.45	n/a
10	Concrete	1.3	n/a	4	n/a	29.02	n/a
11	Concrete	1.3	n/a	9	n/a	82.75	n/a
12	Concrete	1.3	n/a	5	n/a	39.76	n/a
13	Concrete	1.3	n/a	5	n/a	39.76	n/a
14	Concrete	1.3	n/a	5	n/a	39.76	n/a
15	Concrete	1.3	n/a	5	n/a	39.76	n/a
16	Concrete	1.3	n/a	4	n/a	29.02	n/a
17	Concrete	1.3	n/a	5	n/a	39.76	n/a
				Action Level		100	n/a

Building	5
Survey Unit	6 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/7/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.4	n/a	2	n/a	6.45	n/a
19	Drywall	1.4	n/a	3	n/a	17.19	n/a
20	Drywall	1.4	n/a	5	n/a	38.69	n/a
21	Drywall	1.4	n/a	6	n/a	49.43	n/a
22	Drywall	1.4	n/a	4	n/a	27.94	n/a
23	Steel	1.6	n/a	1	n/a	-6.45	n/a
24	Drywall	1.4	n/a	2	n/a	6.45	n/a
25	Drywall	1.4	n/a	4	n/a	27.94	n/a
26	Glass	1.5	n/a	3	n/a	16.12	n/a
27	Glass	1.5	n/a	2	n/a	5.37	n/a
28	Glass	1.5	n/a	2	n/a	5.37	n/a
29	Steel	1.6	n/a	3	n/a	15.05	n/a
30	Steel	1.6	n/a	6	n/a	47.28	n/a
31	Glass	1.5	n/a	1	n/a	-5.37	n/a
32	Glass	1.5	n/a	2	n/a	5.37	n/a
33	Glass	1.5	n/a	3	n/a	16.12	n/a
34	Drywall	1.4	n/a	1	n/a	-4.30	n/a
				Action Level		100	n/a

Building	5
Survey Unit	7 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	3	n/a	17.19	n/a
2	Drywall	1.4	n/a	4	n/a	27.94	n/a
3	Drywall	1.4	n/a	3	n/a	17.19	n/a
4	Drywall	1.4	n/a	2	n/a	6.45	n/a
5	Drywall	1.4	n/a	4	n/a	27.94	n/a
6	Drywall	1.4	n/a	3	n/a	17.19	n/a
7	Drywall	1.4	n/a	2	n/a	6.45	n/a
8	Drywall	1.4	n/a	3	n/a	17.19	n/a
9	Glass	1.5	n/a	3	n/a	16.12	n/a
10	Drywall	1.4	n/a	3	n/a	17.19	n/a
11	Concrete	1.3	n/a	3	n/a	18.27	n/a
12	Concrete	1.3	n/a	5	n/a	39.76	n/a
13	Concrete	1.3	n/a	4	n/a	29.02	n/a
14	Concrete	1.3	n/a	3	n/a	18.27	n/a
15	Concrete	1.3	n/a	4	n/a	29.02	n/a
16	Concrete	1.3	n/a	3	n/a	18.27	n/a
17	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	7 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/7/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.4	n/a	3	n/a	17.19	n/a
19	Drywall	1.4	n/a	8	n/a	70.93	n/a
20	Drywall	1.4	n/a	6	n/a	49.43	n/a
21	Drywall	1.4	n/a	6	n/a	49.43	n/a
22	Drywall	1.4	n/a	4	n/a	27.94	n/a
23	Drywall	1.4	n/a	3	n/a	17.19	n/a
24	Drywall	1.4	n/a	2	n/a	6.45	n/a
25	Drywall	1.4	n/a	1	n/a	-4.30	n/a
26	Drywall	1.4	n/a	2	n/a	6.45	n/a
27	Concrete	1.3	n/a	2	n/a	7.52	n/a
28	Concrete	1.3	n/a	7	n/a	61.25	n/a
29	Concrete	1.3	n/a	4	n/a	29.02	n/a
30	Steel	1.6	n/a	2	n/a	4.30	n/a
31	Steel	1.6	n/a	4	n/a	25.79	n/a
32	Steel	1.6	n/a	3	n/a	15.05	n/a
33	Concrete	1.3	n/a	4	n/a	29.02	n/a
34	Drywall	1.4	n/a	1	n/a	-4.30	n/a
				Action Level		100	n/a

Building	5
Survey Unit	8 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/1/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	16	n/a	157.97	n/a
2	Concrete	1.3	n/a	6	n/a	50.51	n/a
3	Concrete	1.3	n/a	10	n/a	93.49	n/a
4	Concrete	1.3	n/a	51	n/a	534.10	n/a
5	Concrete	1.3	n/a	7	n/a	61.25	n/a
6	Concrete	1.3	n/a	8	n/a	72.00	n/a
7	Concrete	1.3	n/a	5	n/a	39.76	n/a
8	Concrete	1.3	n/a	6	n/a	50.51	n/a
9	Concrete	1.3	n/a	5	n/a	39.76	n/a
10	Concrete	1.3	n/a	6	n/a	50.51	n/a
11	Concrete	1.3	n/a	10	n/a	93.49	n/a
12	Concrete	1.3	n/a	8	n/a	72.00	n/a
13	CinderBlock	1.2	n/a	16	n/a	159.05	n/a
14	CinderBlock	1.2	n/a	7	n/a	62.33	n/a
15	CinderBlock	1.2	n/a	8	n/a	73.08	n/a
16	CinderBlock	1.2	n/a	2	n/a	8.60	n/a
17	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	8 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/7/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.3	n/a	2	n/a	7.52	n/a
19	Concrete	1.3	n/a	3	n/a	18.27	n/a
20	Concrete	1.3	n/a	7	n/a	61.25	n/a
21	Concrete	1.3	n/a	7	n/a	61.25	n/a
22	Concrete	1.3	n/a	7	n/a	61.25	n/a
23	Concrete	1.3	n/a	6	n/a	50.51	n/a
24	Concrete	1.3	n/a	8	n/a	72.00	n/a
25	Concrete	1.3	n/a	5	n/a	39.76	n/a
26	Concrete	1.3	n/a	4	n/a	29.02	n/a
27	Concrete	1.3	n/a	3	n/a	18.27	n/a
28	Concrete	1.3	n/a	4	n/a	29.02	n/a
29	Concrete	1.3	n/a	8	n/a	72.00	n/a
30	Concrete	1.3	n/a	3	n/a	18.27	n/a
31	Concrete	1.3	n/a	7	n/a	61.25	n/a
32	Concrete	1.3	n/a	5	n/a	39.76	n/a
33	Concrete	1.3	n/a	6	n/a	50.51	n/a
34	Concrete	1.3	n/a	7	n/a	61.25	n/a
				Action Level		100	n/a

Building	5
Survey Unit	9 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/22/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	3	n/a	18.27	n/a
2	Concrete	1.3	n/a	7	n/a	61.25	n/a
3	Concrete	1.3	n/a	7	n/a	61.25	n/a
4	Glass	1.5	n/a	4	n/a	26.87	n/a
5	Glass	1.5	n/a	6	n/a	48.36	n/a
6	Glass	1.5	n/a	1	n/a	-5.37	n/a
7	Glass	1.5	n/a	8	n/a	69.85	n/a
8	Steel	1.6	n/a	3	n/a	15.05	n/a
9	Glass	1.5	n/a	2	n/a	5.37	n/a
10	Concrete	1.3	n/a	13	n/a	125.73	n/a
11	Concrete	1.3	n/a	10	n/a	93.49	n/a
12	Concrete	1.3	n/a	13	n/a	125.73	n/a
13	Concrete	1.3	n/a	8	n/a	72.00	n/a
14	Concrete	1.3	n/a	7	n/a	61.25	n/a
15	Concrete	1.3	n/a	4	n/a	29.02	n/a
16	Concrete	1.3	n/a	6	n/a	50.51	n/a
17	Concrete	1.3	n/a	9	n/a	82.75	n/a
				Action Level		100	n/a

Building	5
Survey Unit	9 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Steel	1.0	n/a	5	n/a	43.24	n/a
19	Wood	1.1	n/a	2	n/a	9.73	n/a
20	Steel	1.0	n/a	1	n/a	0.00	n/a
21	Steel	1.0	n/a	6	n/a	54.05	n/a
22	Steel	1.0	n/a	2	n/a	10.81	n/a
23	Steel	1.0	n/a	4	n/a	32.43	n/a
24	Steel	1.0	n/a	7	n/a	64.86	n/a
25	Concrete	1.1	n/a	3	n/a	20.54	n/a
26	Concrete	1.1	n/a	2	n/a	9.73	n/a
27	Concrete	1.1	n/a	4	n/a	31.35	n/a
28	Concrete	1.1	n/a	1	n/a	-1.08	n/a
29	Concrete	1.1	n/a	6	n/a	52.97	n/a
30	Concrete	1.1	n/a	2	n/a	9.73	n/a
31	Steel	1.0	n/a	1	n/a	0.00	n/a
32	Wood	1.1	n/a	3	n/a	20.54	n/a
33	Wood	1.1	n/a	3	n/a	20.54	n/a
34	Wood	1.1	n/a	1	n/a	-1.08	n/a
				Action Level		100	n/a

Building	5
Survey Unit	10 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/22/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	4	n/a	29.02	n/a
2	Concrete	1.3	n/a	4	n/a	29.02	n/a
3	Wood	1.7	n/a	3	n/a	13.97	n/a
4	Steel	1.6	n/a	4	n/a	25.79	n/a
5	Steel	1.6	n/a	3	n/a	15.05	n/a
6	Wood	1.7	n/a	3	n/a	13.97	n/a
7	Glass	1.5	n/a	3	n/a	16.12	n/a
8	Glass	1.5	n/a	2	n/a	5.37	n/a
9	Glass	1.5	n/a	1	n/a	-5.37	n/a
10	Concrete	1.3	n/a	9	n/a	82.75	n/a
11	Concrete	1.3	n/a	7	n/a	61.25	n/a
12	Concrete	1.3	n/a	13	n/a	125.73	n/a
13	Concrete	1.3	n/a	13	n/a	125.73	n/a
14	Concrete	1.3	n/a	14	n/a	136.48	n/a
15	Concrete	1.3	n/a	7	n/a	61.25	n/a
16	Concrete	1.3	n/a	7	n/a	61.25	n/a
17	Concrete	1.3	n/a	7	n/a	61.25	n/a
				Action Level		100	n/a

Building	5
Survey Unit	10 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Steel	1.0	n/a	2	n/a	10.81	n/a
19	Steel	1.0	n/a	1	n/a	0.00	n/a
20	Steel	1.0	n/a	4	n/a	32.43	n/a
21	Steel	1.0	n/a	2	n/a	10.81	n/a
22	Steel	1.0	n/a	1	n/a	0.00	n/a
23	Steel	1.0	n/a	0	n/a	-10.81	n/a
24	Steel	1.0	n/a	3	n/a	21.62	n/a
25	Concrete	1.1	n/a	1	n/a	-1.08	n/a
26	Concrete	1.1	n/a	7	n/a	63.78	n/a
27	Concrete	1.1	n/a	2	n/a	9.73	n/a
28	Steel	1.0	n/a	1	n/a	0.00	n/a
29	Steel	1.0	n/a	4	n/a	32.43	n/a
30	Steel	1.0	n/a	2	n/a	10.81	n/a
31	Wood	1.1	n/a	3	n/a	20.54	n/a
32	Wood	1.1	n/a	5	n/a	42.16	n/a
33	Wood	1.1	n/a	2	n/a	9.73	n/a
34	Wood	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	11 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/22/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	3	n/a	18.27	n/a
2	Concrete	1.3	n/a	2	n/a	7.52	n/a
3	Concrete	1.3	n/a	3	n/a	18.27	n/a
4	Drywall	1.4	n/a	4	n/a	27.94	n/a
5	Drywall	1.4	n/a	2	n/a	6.45	n/a
6	Drywall	1.4	n/a	3	n/a	17.19	n/a
7	Drywall	1.4	n/a	2	n/a	6.45	n/a
8	Drywall	1.4	n/a	3	n/a	17.19	n/a
9	Drywall	1.4	n/a	4	n/a	27.94	n/a
10	Concrete	1.3	n/a	6	n/a	50.51	n/a
11	Concrete	1.3	n/a	17	n/a	168.72	n/a
12	Concrete	1.3	n/a	21	n/a	211.71	n/a
13	Concrete	1.3	n/a	5	n/a	39.76	n/a
14	Concrete	1.3	n/a	3	n/a	18.27	n/a
15	Concrete	1.3	n/a	3	n/a	18.27	n/a
16	Concrete	1.3	n/a	4	n/a	29.02	n/a
17	Concrete	1.3	n/a	7	n/a	61.25	n/a
18	Drywall	1.4	n/a	3	n/a	17.19	n/a
				Action Level		100	n/a

Building	5
Survey Unit	11 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/14/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.4	n/a	3	n/a	17.19	n/a
19	Drywall	1.4	n/a	3	n/a	17.19	n/a
20	Drywall	1.4	n/a	4	n/a	27.94	n/a
21	Drywall	1.4	n/a	2	n/a	6.45	n/a
22	Concrete	1.3	n/a	3	n/a	18.27	n/a
23	Concrete	1.3	n/a	4	n/a	29.02	n/a
24	Concrete	1.3	n/a	2	n/a	7.52	n/a
25	Drywall	1.4	n/a	3	n/a	17.19	n/a
26	Drywall	1.4	n/a	2	n/a	6.45	n/a
27	Concrete	1.3	n/a	1	n/a	-3.22	n/a
28	Concrete	1.3	n/a	3	n/a	18.27	n/a
29	Concrete	1.3	n/a	5	n/a	39.76	n/a
30	Concrete	1.3	n/a	2	n/a	7.52	n/a
31	Concrete	1.3	n/a	3	n/a	18.27	n/a
32	Concrete	1.3	n/a	3	n/a	18.27	n/a
33	Concrete	1.3	n/a	4	n/a	29.02	n/a
34	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Note: Sequence error occurred during initial lay out of direct measurement location number 18. Measurement location number 18 for SU -11 will occur at both floors and walls and at overheads.

Building	5
Survey Unit	12 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/1/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	5	n/a	38.69	n/a
2	Drywall	1.4	n/a	7	n/a	60.18	n/a
3	Drywall	1.4	n/a	3	n/a	17.19	n/a
4	Glass	1.5	n/a	4	n/a	26.87	n/a
5	Drywall	1.4	n/a	2	n/a	6.45	n/a
6	Drywall	1.4	n/a	2	n/a	6.45	n/a
7	Wood	1.7	n/a	3	n/a	13.97	n/a
8	Drywall	1.4	n/a	5	n/a	38.69	n/a
9	Drywall	1.4	n/a	6	n/a	49.43	n/a
10	Concrete	1.3	n/a	2	n/a	7.52	n/a
11	Steel	1.6	n/a	3	n/a	15.05	n/a
12	Drywall	1.4	n/a	3	n/a	17.19	n/a
13	Drywall	1.4	n/a	5	n/a	38.69	n/a
14	Drywall	1.4	n/a	5	n/a	38.69	n/a
15	Concrete	1.3	n/a	6	n/a	50.51	n/a
16	Concrete	1.3	n/a	8	n/a	72.00	n/a
17	Concrete	1.3	n/a	5	n/a	39.76	n/a
18	Concrete	1.3	n/a	14	n/a	136.48	n/a
				Action Level		100	n/a

Building	5
Survey Unit	12 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/22/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Drywall	1.0	n/a	3	n/a	21.62	n/a
20	Steel	1.0	n/a	1	n/a	0.00	n/a
21	Drywall	1.0	n/a	4	n/a	32.43	n/a
22	Steel	1.0	n/a	2	n/a	10.81	n/a
23	Drywall	1.0	n/a	2	n/a	10.81	n/a
24	Drywall	1.0	n/a	0	n/a	-10.81	n/a
25	Drywall	1.0	n/a	3	n/a	21.62	n/a
26	Drywall	1.0	n/a	1	n/a	0.00	n/a
27	Drywall	1.0	n/a	7	n/a	64.86	n/a
28	Drywall	1.0	n/a	2	n/a	10.81	n/a
29	Drywall	1.0	n/a	5	n/a	43.24	n/a
30	Drywall	1.0	n/a	2	n/a	10.81	n/a
31	Drywall	1.0	n/a	1	n/a	0.00	n/a
32	Drywall	1.0	n/a	1	n/a	0.00	n/a
33	Drywall	1.0	n/a	3	n/a	21.62	n/a
34	Drywall	1.0	n/a	2	n/a	10.81	n/a
35	Glass	1.4	n/a	2	n/a	6.49	n/a
36	Glass	1.4	n/a	3	n/a	17.30	n/a
37	Glass	1.4	n/a	1	n/a	-4.32	n/a
				Action Level		100	n/a

Building	5
Survey Unit	13 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	2	n/a	6.45	n/a
2	Drywall	1.4	n/a	4	n/a	27.94	n/a
3	Drywall	1.4	n/a	3	n/a	17.19	n/a
4	Wood	1.7	n/a	6	n/a	46.21	n/a
5	Glass	1.5	n/a	4	n/a	26.87	n/a
6	Drywall	1.4	n/a	4	n/a	27.94	n/a
7	Steel	1.6	n/a	1	n/a	-6.45	n/a
8	Drywall	1.4	n/a	4	n/a	27.94	n/a
9	Glass	1.5	n/a	6	n/a	48.36	n/a
10	Drywall	1.4	n/a	2	n/a	6.45	n/a
11	Drywall	1.4	n/a	2	n/a	6.45	n/a
12	Drywall	1.4	n/a	2	n/a	6.45	n/a
13	Drywall	1.4	n/a	1	n/a	-4.30	n/a
14	Drywall	1.4	n/a	5	n/a	38.69	n/a
15	Concrete	1.3	n/a	5	n/a	39.76	n/a
16	Concrete	1.3	n/a	4	n/a	29.02	n/a
17	Concrete	1.3	n/a	13	n/a	125.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	13 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/22/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Wood	1.1	n/a	4	n/a	31.35	n/a
19	Wood	1.1	n/a	2	n/a	9.73	n/a
20	Wood	1.1	n/a	8	n/a	74.59	n/a
21	Steel	1.0	n/a	3	n/a	21.62	n/a
22	Drywall	1.0	n/a	1	n/a	0.00	n/a
23	Drywall	1.0	n/a	2	n/a	10.81	n/a
24	Drywall	1.0	n/a	3	n/a	21.62	n/a
25	Drywall	1.0	n/a	1	n/a	0.00	n/a
26	Drywall	1.0	n/a	0	n/a	-10.81	n/a
27	Steel	1.0	n/a	5	n/a	43.24	n/a
28	Steel	1.0	n/a	2	n/a	10.81	n/a
29	Steel	1.0	n/a	2	n/a	10.81	n/a
30	Glass	1.4	n/a	3	n/a	17.30	n/a
31	Steel	1.0	n/a	1	n/a	0.00	n/a
32	Glass	1.4	n/a	2	n/a	6.49	n/a
33	Glass	1.4	n/a	3	n/a	17.30	n/a
34	Glass	1.4	n/a	1	n/a	-4.32	n/a
				Action Level		100	n/a

Building	5
Survey Unit	14 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	4	n/a	27.94	n/a
2	Drywall	1.4	n/a	2	n/a	6.45	n/a
3	Drywall	1.4	n/a	7	n/a	60.18	n/a
4	Drywall	1.4	n/a	3	n/a	17.19	n/a
5	Wood	1.7	n/a	4	n/a	24.72	n/a
6	Wood	1.7	n/a	2	n/a	3.22	n/a
7	Wood	1.7	n/a	3	n/a	13.97	n/a
8	Drywall	1.4	n/a	1	n/a	-4.30	n/a
9	Drywall	1.4	n/a	2	n/a	6.45	n/a
10	Drywall	1.4	n/a	3	n/a	17.19	n/a
11	Drywall	1.4	n/a	4	n/a	27.94	n/a
12	Drywall	1.4	n/a	3	n/a	17.19	n/a
13	Drywall	1.4	n/a	5	n/a	38.69	n/a
14	Drywall	1.4	n/a	2	n/a	6.45	n/a
15	Concrete	1.3	n/a	13	n/a	125.73	n/a
16	Concrete	1.3	n/a	8	n/a	72.00	n/a
17	Concrete	1.3	n/a	12	n/a	114.99	n/a
				Action Level		100	n/a

Building	5
Survey Unit	14 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/24/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	7	n/a	64.86	n/a
19	Drywall	1.0	n/a	3	n/a	21.62	n/a
20	Drywall	1.0	n/a	4	n/a	32.43	n/a
21	Drywall	1.0	n/a	3	n/a	21.62	n/a
22	Drywall	1.0	n/a	2	n/a	10.81	n/a
23	Drywall	1.0	n/a	1	n/a	0.00	n/a
24	Drywall	1.0	n/a	2	n/a	10.81	n/a
25	Drywall	1.0	n/a	6	n/a	54.05	n/a
26	Drywall	1.0	n/a	2	n/a	10.81	n/a
27	Drywall	1.0	n/a	1	n/a	0.00	n/a
28	Drywall	1.0	n/a	1	n/a	0.00	n/a
29	Glass	1.4	n/a	3	n/a	17.30	n/a
30	Wood	1.1	n/a	8	n/a	74.59	n/a
31	Steel	1.0	n/a	2	n/a	10.81	n/a
32	Steel	1.0	n/a	5	n/a	43.24	n/a
33	Steel	1.0	n/a	2	n/a	10.81	n/a
34	Glass	1.4	n/a	1	n/a	-4.32	n/a
				Action Level		100	n/a

Building	5
Survey Unit	15 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	2	n/a	6.45	n/a
2	Drywall	1.4	n/a	3	n/a	17.19	n/a
3	Drywall	1.4	n/a	4	n/a	27.94	n/a
4	Drywall	1.4	n/a	3	n/a	17.19	n/a
5	Drywall	1.4	n/a	4	n/a	27.94	n/a
6	Drywall	1.4	n/a	3	n/a	17.19	n/a
7	Drywall	1.4	n/a	4	n/a	27.94	n/a
8	Drywall	1.4	n/a	3	n/a	17.19	n/a
9	Drywall	1.4	n/a	3	n/a	17.19	n/a
10	Drywall	1.4	n/a	2	n/a	6.45	n/a
11	Drywall	1.4	n/a	4	n/a	27.94	n/a
12	Steel	1.6	n/a	9	n/a	79.52	n/a
13	Concrete	1.3	n/a	8	n/a	72.00	n/a
14	Glass	1.5	n/a	3	n/a	16.12	n/a
15	Glass	1.5	n/a	4	n/a	26.87	n/a
16	Concrete	1.3	n/a	8	n/a	72.00	n/a
17	Concrete	1.3	n/a	5	n/a	39.76	n/a
18	Concrete	1.3	n/a	10	n/a	93.49	n/a
19	Concrete	1.3	n/a	4	n/a	29.02	n/a
20	Concrete	1.3	n/a	3	n/a	18.27	n/a
21	Wood	1.7	n/a	3	n/a	13.97	n/a
				Action Level		100	n/a

Building	5
Survey Unit	15 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/24/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
21	Drywall	1.0	n/a	3	n/a	21.62	n/a
22	Drywall	1.0	n/a	2	n/a	10.81	n/a
23	Drywall	1.0	n/a	2	n/a	10.81	n/a
24	Drywall	1.0	n/a	0	n/a	-10.81	n/a
25	Drywall	1.0	n/a	5	n/a	43.24	n/a
26	Drywall	1.0	n/a	2	n/a	10.81	n/a
27	Drywall	1.0	n/a	3	n/a	21.62	n/a
28	Drywall	1.0	n/a	4	n/a	32.43	n/a
29	Drywall	1.0	n/a	2	n/a	10.81	n/a
30	Glass	1.4	n/a	5	n/a	38.92	n/a
31	Wood	1.1	n/a	8	n/a	74.59	n/a
32	Glass	1.4	n/a	3	n/a	17.30	n/a
33	Glass	1.4	n/a	1	n/a	-4.32	n/a
34	Glass	1.4	n/a	2	n/a	6.49	n/a
35	Wood	1.1	n/a	3	n/a	20.54	n/a
36	Wood	1.1	n/a	4	n/a	31.35	n/a
37	Wood	1.1	n/a	2	n/a	9.73	n/a
Action Level						100	n/a

Note: Sequence error occurred during initial lay out of direct measurement location number 21. Measurement location number 21 for SU -15 will occur at both floors and walls and at overheads. Data has been confirmed.

Building	5
Survey Unit	16 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	3	n/a	17.19	n/a
2	Wood	1.7	n/a	2	n/a	3.22	n/a
3	Drywall	1.4	n/a	6	n/a	49.43	n/a
4	Drywall	1.4	n/a	3	n/a	17.19	n/a
5	Drywall	1.4	n/a	4	n/a	27.94	n/a
6	Drywall	1.4	n/a	4	n/a	27.94	n/a
7	Concrete	1.3	n/a	11	n/a	104.24	n/a
8	Concrete	1.3	n/a	5	n/a	39.76	n/a
9	Concrete	1.3	n/a	4	n/a	29.02	n/a
10	Concrete	1.3	n/a	12	n/a	114.99	n/a
11	Concrete	1.3	n/a	25	n/a	254.69	n/a
12	Concrete	1.3	n/a	8	n/a	72.00	n/a
13	Concrete	1.3	n/a	26	n/a	265.44	n/a
14	Concrete	1.3	n/a	22	n/a	222.45	n/a
15	Concrete	1.3	n/a	3	n/a	18.27	n/a
16	Concrete	1.3	n/a	7	n/a	61.25	n/a
17	Concrete	1.3	n/a	5	n/a	39.76	n/a
				Action Level		100	n/a

Building	5
Survey Unit	16 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/25/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	0	n/a	-10.81	n/a
19	Drywall	1.0	n/a	3	n/a	21.62	n/a
20	Wood	1.1	n/a	1	n/a	-1.08	n/a
21	Steel	1.0	n/a	2	n/a	10.81	n/a
22	Glass	1.4	n/a	2	n/a	6.49	n/a
23	Glass	1.4	n/a	1	n/a	-4.32	n/a
24	Glass	1.4	n/a	3	n/a	17.30	n/a
25	Drywall	1.0	n/a	2	n/a	10.81	n/a
26	Steel	1.0	n/a	1	n/a	0.00	n/a
27	Steel	1.0	n/a	2	n/a	10.81	n/a
28	Steel	1.0	n/a	1	n/a	0.00	n/a
29	Glass	1.4	n/a	1	n/a	-4.32	n/a
30	Glass	1.4	n/a	5	n/a	38.92	n/a
31	Glass	1.4	n/a	3	n/a	17.30	n/a
32	Steel	1.0	n/a	2	n/a	10.81	n/a
33	Steel	1.0	n/a	0	n/a	-10.81	n/a
34	Steel	1.0	n/a	1	n/a	0.00	n/a
				Action Level		100	n/a

Building	5
Survey Unit	17- walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Glass	1.4	n/a	0	n/a	-15.14	n/a
2	Glass	1.4	n/a	3	n/a	17.30	n/a
3	Glass	1.4	n/a	4	n/a	28.11	n/a
4	Glass	1.4	n/a	2	n/a	6.49	n/a
5	Glass	1.4	n/a	1	n/a	-4.32	n/a
6	Drywall	1.0	n/a	2	n/a	10.81	n/a
7	Glass	1.4	n/a	3	n/a	17.30	n/a
8	Drywall	1.0	n/a	2	n/a	10.81	n/a
9	Drywall	1.0	n/a	3	n/a	21.62	n/a
10	Wood	1.1	n/a	2	n/a	9.73	n/a
11	Wood	1.1	n/a	2	n/a	9.73	n/a
12	Glass	1.4	n/a	7	n/a	60.54	n/a
13	Glass	1.4	n/a	6	n/a	49.73	n/a
14	Glass	1.4	n/a	2	n/a	6.49	n/a
15	Glass	1.4	n/a	3	n/a	17.30	n/a
16	Glass	1.4	n/a	1	n/a	-4.32	n/a
17	Glass	1.4	n/a	1	n/a	-4.32	n/a
				Action Level		100	n/a

Building	5
Survey Unit	17 - floors
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.1	n/a	3	n/a	20.54	n/a
19	Concrete	1.1	n/a	4	n/a	31.35	n/a
20	Concrete	1.1	n/a	5	n/a	42.16	n/a
21	Concrete	1.1	n/a	6	n/a	52.97	n/a
22	Concrete	1.1	n/a	5	n/a	42.16	n/a
23	Concrete	1.1	n/a	6	n/a	52.97	n/a
24	Concrete	1.1	n/a	2	n/a	9.73	n/a
25	Concrete	1.1	n/a	3	n/a	20.54	n/a
26	Concrete	1.1	n/a	2	n/a	9.73	n/a
27	Concrete	1.1	n/a	3	n/a	20.54	n/a
28	Concrete	1.1	n/a	3	n/a	20.54	n/a
29	Concrete	1.1	n/a	6	n/a	52.97	n/a
30	Concrete	1.1	n/a	3	n/a	20.54	n/a
31	Concrete	1.1	n/a	3	n/a	20.54	n/a
32	Concrete	1.1	n/a	5	n/a	42.16	n/a
33	Concrete	1.1	n/a	1	n/a	-1.08	n/a
34	Concrete	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	17 - Overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Glass	1.4	n/a	4	n/a	28.11	n/a
36	Glass	1.4	n/a	5	n/a	38.92	n/a
37	Glass	1.4	n/a	3	n/a	17.30	n/a
38	Glass	1.4	n/a	4	n/a	28.11	n/a
39	Glass	1.4	n/a	3	n/a	17.30	n/a
40	Drywall	1.0	n/a	6	n/a	54.05	n/a
41	Glass	1.4	n/a	3	n/a	17.30	n/a
42	Glass	1.4	n/a	2	n/a	6.49	n/a
43	Glass	1.4	n/a	4	n/a	28.11	n/a
44	Glass	1.4	n/a	3	n/a	17.30	n/a
45	FiberGlass	1.4	n/a	3	n/a	17.30	n/a
46	FiberGlass	1.4	n/a	5	n/a	38.92	n/a
47	FiberGlass	1.4	n/a	6	n/a	49.73	n/a
48	FiberGlass	1.4	n/a	3	n/a	17.30	n/a
49	FiberGlass	1.4	n/a	5	n/a	38.92	n/a
50	FiberGlass	1.4	n/a	4	n/a	28.11	n/a
51	FiberGlass	1.4	n/a	3	n/a	17.30	n/a
				Action Level		100	n/a

Building	5
Survey Unit	18- walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/10/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Wood	1.7	n/a	3	n/a	13.97	n/a
2	Steel	1.6	n/a	4	n/a	25.79	n/a
3	Drywall	1.4	n/a	3	n/a	17.19	n/a
4	Drywall	1.4	n/a	2	n/a	6.45	n/a
5	Drywall	1.4	n/a	3	n/a	17.19	n/a
6	Drywall	1.4	n/a	3	n/a	17.19	n/a
7	Drywall	1.4	n/a	5	n/a	38.69	n/a
8	Drywall	1.4	n/a	1	n/a	-4.30	n/a
9	Drywall	1.4	n/a	1	n/a	-4.30	n/a
10	Drywall	1.4	n/a	2	n/a	6.45	n/a
11	Steel	1.6	n/a	1	n/a	-6.45	n/a
12	Steel	1.6	n/a	4	n/a	25.79	n/a
13	Steel	1.6	n/a	1	n/a	-6.45	n/a
14	Steel	1.6	n/a	4	n/a	25.79	n/a
15	Steel	1.6	n/a	2	n/a	4.30	n/a
16	Steel	1.6	n/a	2	n/a	4.30	n/a
17	Wood	1.7	n/a	1	n/a	-7.52	n/a
18	Steel	1.6	n/a	2	n/a	4.30	n/a
				Action Level		100	n/a

Building	5
Survey Unit	18 - floors
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/10/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Concrete	1.3	n/a	2	n/a	7.52	n/a
20	Concrete	1.3	n/a	4	n/a	29.02	n/a
21	Concrete	1.3	n/a	2	n/a	7.52	n/a
22	Concrete	1.3	n/a	5	n/a	39.76	n/a
23	Concrete	1.3	n/a	3	n/a	18.27	n/a
24	Concrete	1.3	n/a	3	n/a	18.27	n/a
25	Concrete	1.3	n/a	1	n/a	-3.22	n/a
26	Concrete	1.3	n/a	0	n/a	-13.97	n/a
27	Concrete	1.3	n/a	4	n/a	29.02	n/a
28	Concrete	1.3	n/a	2	n/a	7.52	n/a
29	Concrete	1.3	n/a	5	n/a	39.76	n/a
30	Concrete	1.3	n/a	3	n/a	18.27	n/a
31	Concrete	1.3	n/a	4	n/a	29.02	n/a
32	Concrete	1.3	n/a	3	n/a	18.27	n/a
33	Concrete	1.3	n/a	1	n/a	-3.22	n/a
34	Concrete	1.3	n/a	1	n/a	-3.22	n/a
35	Concrete	1.3	n/a	4	n/a	29.02	n/a
36	Concrete	1.3	n/a	2	n/a	7.52	n/a
37	Concrete	1.3	n/a	3	n/a	18.27	n/a
38	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	18 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	12/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
39	Wood	3.0	n/a	4	n/a	10.26	n/a
40	Glass	2.5	n/a	6	n/a	35.90	n/a
41	Glass	2.5	n/a	2	n/a	-5.13	n/a
42	Glass	2.5	n/a	1	n/a	-15.38	n/a
43	Glass	2.5	n/a	3	n/a	5.13	n/a
44	Glass	2.5	n/a	3	n/a	5.13	n/a
45	Drywall	3.0	n/a	3	n/a	0.00	n/a
46	Drywall	3.0	n/a	2	n/a	-10.26	n/a
47	Drywall	3.0	n/a	4	n/a	10.26	n/a
48	Drywall	3.0	n/a	2	n/a	-10.26	n/a
49	Drywall	3.0	n/a	3	n/a	0.00	n/a
50	Wood						
51	Steel						
52	Steel			see 3-2-11 Survey			
53	Steel						
54	Wood						
55	Wood						
				Action Level		100	n/a

Building	5
Survey Unit	18 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	3/2/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
39	Wood						
40	Glass						
41	Glass						
42	Glass						
43	Glass	see 12-23-10 Survey					
44	Glass						
45	Drywall						
46	Drywall						
47	Drywall						
48	Drywall						
49	Drywall						
50	Wood	1.1	n/a	2	n/a	9.73	n/a
51	Steel	1.0	n/a	1	n/a	0.00	n/a
52	Steel	1.0	n/a	2	n/a	10.81	n/a
53	Steel	1.0	n/a	0	n/a	-10.81	n/a
54	Wood	1.1	n/a	3	n/a	20.54	n/a
55	Wood	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	19 - floors/walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	12/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Wood	3.0	n/a	2	n/a	-10.26	n/a
2	Wood	3.0	n/a	3	n/a	0.00	n/a
3	Wood	3.0	n/a	2	n/a	-10.26	n/a
4	Wood	3.0	n/a	5	n/a	20.51	n/a
5	Wood	3.0	n/a	2	n/a	-10.26	n/a
6	Wood	3.0	n/a	2	n/a	-10.26	n/a
7	Glass	2.5	n/a	4	n/a	15.38	n/a
8	Wood	3.0	n/a	3	n/a	0.00	n/a
9	Wood	3.0	n/a	1	n/a	-20.51	n/a
10	Wood	3.0	n/a	3	n/a	0.00	n/a
11	Concrete	2.4	n/a	5	n/a	26.67	n/a
12	Concrete	2.4	n/a	3	n/a	6.15	n/a
13	Concrete	2.4	n/a	3	n/a	6.15	n/a
14	Concrete	2.4	n/a	4	n/a	16.41	n/a
15	Concrete	2.4	n/a	4	n/a	16.41	n/a
16	Concrete	2.4	n/a	4	n/a	16.41	n/a
17	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	19 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	12/20/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Wood	3.0	n/a	3	n/a	0.00	n/a
19	Wood	3.0	n/a	2	n/a	-10.26	n/a
20	Wood	3.0	n/a	5	n/a	20.51	n/a
21	Wood	3.0	n/a	2	n/a	-10.26	n/a
22	Wood	3.0	n/a	1	n/a	-20.51	n/a
23	Wood	3.0	n/a	2	n/a	-10.26	n/a
24	Wood	3.0	n/a	1	n/a	-20.51	n/a
25	Concrete	2.4	n/a	5	n/a	26.67	n/a
26	Wood	3.0	n/a	4	n/a	10.26	n/a
27	Wood	3.0	n/a	3	n/a	0.00	n/a
28	Wood	3.0	n/a	2	n/a	-10.26	n/a
29	Wood	3.0	n/a	2	n/a	-10.26	n/a
30	Glass	2.5	n/a	3	n/a	5.13	n/a
31	Glass	2.5	n/a	1	n/a	-15.38	n/a
32	Glass	2.5	n/a	4	n/a	15.38	n/a
33	Wood	3.0	n/a	2	n/a	-10.26	n/a
34	Wood	3.0	n/a	3	n/a	0.00	n/a
				Action Level		100	n/a

Building	5
Survey Unit	20 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	4	n/a	29.02	n/a
2	Wood	1.7	n/a	4	n/a	24.72	n/a
3	Wood	1.7	n/a	11	n/a	99.94	n/a
4	Concrete	1.3	n/a	7	n/a	61.25	n/a
5	Concrete	1.3	n/a	6	n/a	50.51	n/a
6	Concrete	1.3	n/a	5	n/a	39.76	n/a
7	Concrete	1.3	n/a	23	n/a	233.20	n/a
8	Concrete	1.3	n/a	11	n/a	104.24	n/a
9	Concrete	1.3	n/a	6	n/a	50.51	n/a
10	Concrete	1.3	n/a	4	n/a	29.02	n/a
11	Concrete	1.3	n/a	5	n/a	39.76	n/a
12	Concrete	1.3	n/a	3	n/a	18.27	n/a
13	Concrete	1.3	n/a	1	n/a	-3.22	n/a
14	Concrete	1.3	n/a	1	n/a	-3.22	n/a
15	Concrete	1.3	n/a	5	n/a	39.76	n/a
16	Concrete	1.3	n/a	10	n/a	93.49	n/a
17	Concrete	1.3	n/a	5	n/a	39.76	n/a
18	Concrete	1.3	n/a	7	n/a	61.25	n/a
				Action Level		100	n/a

Building	5
Survey Unit	20 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/25/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Steel	1.0	n/a	1	n/a	0.00	n/a
20	Steel	1.0	n/a	10	n/a	97.30	n/a
21	Steel	1.0	n/a	4	n/a	32.43	n/a
22	Steel	1.0	n/a	0	n/a	-10.81	n/a
23	Steel	1.0	n/a	3	n/a	21.62	n/a
24	Glass	1.4	n/a	2	n/a	6.49	n/a
25	Glass	1.4	n/a	3	n/a	17.30	n/a
26	Glass	1.4	n/a	1	n/a	-4.32	n/a
27	Glass	1.4	n/a	2	n/a	6.49	n/a
28	Glass	1.4	n/a	0	n/a	-15.14	n/a
29	Glass	1.4	n/a	2	n/a	6.49	n/a
30	Glass	1.4	n/a	1	n/a	-4.32	n/a
31	Glass	1.4	n/a	3	n/a	17.30	n/a
32	Glass	1.4	n/a	6	n/a	49.73	n/a
33	Glass	1.4	n/a	2	n/a	6.49	n/a
34	Glass	1.4	n/a	1	n/a	-4.32	n/a
35	Steel	1.0	n/a	1	n/a	0.00	n/a
Action Level						100	n/a

Building	5
Survey Unit	21- floors walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	5	n/a	38.69	n/a
2	Drywall	1.4	n/a	3	n/a	17.19	n/a
3	Drywall	1.4	n/a	2	n/a	6.45	n/a
4	Glass	1.5	n/a	5	n/a	37.61	n/a
5	Glass	1.5	n/a	2	n/a	5.37	n/a
6	Concrete	1.3	n/a	4	n/a	29.02	n/a
7	Concrete	1.3	n/a	6	n/a	50.51	n/a
8	Concrete	1.3	n/a	3	n/a	18.27	n/a
9	Concrete	1.3	n/a	3	n/a	18.27	n/a
10	Concrete	1.3	n/a	2	n/a	7.52	n/a
11	Concrete	1.3	n/a	7	n/a	61.25	n/a
12	Concrete	1.3	n/a	2	n/a	7.52	n/a
13	Concrete	1.3	n/a	6	n/a	50.51	n/a
14	Concrete	1.3	n/a	5	n/a	39.76	n/a
15	Concrete	1.3	n/a	4	n/a	29.02	n/a
16	Concrete	1.3	n/a	3	n/a	18.27	n/a
17	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	21 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/24/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Drywall	1.0	n/a	1	n/a	0.00	n/a
20	Drywall	1.0	n/a	5	n/a	43.24	n/a
21	Wood	1.1	n/a	5	n/a	42.16	n/a
22	Drywall	1.0	n/a	2	n/a	10.81	n/a
23	Drywall	1.0	n/a	4	n/a	32.43	n/a
24	Glass	1.4	n/a	2	n/a	6.49	n/a
25	Glass	1.4	n/a	4	n/a	28.11	n/a
26	Glass	1.4	n/a	10	n/a	92.97	n/a
27	Glass	1.4	n/a	3	n/a	17.30	n/a
28	Glass	1.4	n/a	3	n/a	17.30	n/a
29	Glass	1.4	n/a	2	n/a	6.49	n/a
30	Glass	1.4	n/a	5	n/a	38.92	n/a
31	Glass	1.4	n/a	1	n/a	-4.32	n/a
32	Glass	1.4	n/a	1	n/a	-4.32	n/a
33	Steel	1.0	n/a	3	n/a	21.62	n/a
34	Glass	1.4	n/a	2	n/a	6.49	n/a
35	Glass	1.4	n/a	3	n/a	17.30	n/a
				Action Level		100	n/a

Note: Measurement point number 18 was not used in the development of initial survey maps

Building	5
Survey Unit	22 - floors/walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	2	n/a	6.45	n/a
2	Cinderblock	1.2	n/a	2	n/a	8.60	n/a
3	Drywall	1.4	n/a	2	n/a	6.45	n/a
4	Concrete	1.3	n/a	6	n/a	50.51	n/a
5	Concrete	1.3	n/a	6	n/a	50.51	n/a
6	Concrete	1.3	n/a	4	n/a	29.02	n/a
7	Concrete	1.3	n/a	4	n/a	29.02	n/a
8	Concrete	1.3	n/a	4	n/a	29.02	n/a
9	Concrete	1.3	n/a	4	n/a	29.02	n/a
10	Concrete	1.3	n/a	5	n/a	39.76	n/a
11	Concrete	1.3	n/a	3	n/a	18.27	n/a
12	Concrete	1.3	n/a	4	n/a	29.02	n/a
13	Concrete	1.3	n/a	2	n/a	7.52	n/a
14	Concrete	1.3	n/a	5	n/a	39.76	n/a
15	Concrete	1.3	n/a	5	n/a	39.76	n/a
16	Concrete	1.3	n/a	5	n/a	39.76	n/a
17	Concrete	1.3	n/a	5	n/a	39.76	n/a
18	Concrete	1.3	n/a	6	n/a	50.51	n/a
				Action Level		100	n/a

Building	5
Survey Unit	22 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/24/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Wood	1.1	n/a	0	n/a	-11.89	n/a
20	Drywall	1.0	n/a	3	n/a	21.62	n/a
21	Drywall	1.0	n/a	2	n/a	10.81	n/a
22	Drywall	1.0	n/a	7	n/a	64.86	n/a
23	Drywall	1.0	n/a	3	n/a	21.62	n/a
24	Drywall	1.0	n/a	1	n/a	0.00	n/a
25	Drywall	1.0	n/a	2	n/a	10.81	n/a
26	Drywall	1.0	n/a	3	n/a	21.62	n/a
27	Drywall	1.0	n/a	2	n/a	10.81	n/a
28	Glass	1.4	n/a	0	n/a	-15.14	n/a
29	Glass	1.4	n/a	2	n/a	6.49	n/a
30	Steel	1.0	n/a	5	n/a	43.24	n/a
31	Glass	1.4	n/a	3	n/a	17.30	n/a
32	Steel	1.0	n/a	4	n/a	32.43	n/a
33	Glass	1.4	n/a	2	n/a	6.49	n/a
34	Glass	1.4	n/a	1	n/a	-4.32	n/a
35	Steel	1.0	n/a	1	n/a	0.00	n/a
				Action Level		100	n/a

Building	5
Survey Unit	23- floors walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	11/25/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	6	n/a	50.51	n/a
2	Concrete	1.3	n/a	6	n/a	50.51	n/a
3	Concrete	1.3	n/a	4	n/a	29.02	n/a
4	Concrete	1.3	n/a	1	n/a	-3.22	n/a
5	Concrete	1.3	n/a	5	n/a	39.76	n/a
6	Concrete	1.3	n/a	4	n/a	29.02	n/a
7	Drywall	1.4	n/a	1	n/a	-4.30	n/a
8	Concrete	1.3	n/a	4	n/a	29.02	n/a
9	Concrete	1.3	n/a	3	n/a	18.27	n/a
10	Concrete	1.3	n/a	2	n/a	7.52	n/a
11	Concrete	1.3	n/a	6	n/a	50.51	n/a
12	Concrete	1.3	n/a	4	n/a	29.02	n/a
13	Concrete	1.3	n/a	1	n/a	-3.22	n/a
14	Drywall	1.4	n/a	2	n/a	6.45	n/a
15	Concrete	1.3	n/a	4	n/a	29.02	n/a
16	Concrete	1.3	n/a	2	n/a	7.52	n/a
17	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	23 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/24/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Steel	1.0	n/a	5	n/a	43.24	n/a
19	Steel	1.0	n/a	2	n/a	10.81	n/a
20	Steel	1.0	n/a	2	n/a	10.81	n/a
21	Steel	1.0	n/a	4	n/a	32.43	n/a
22	Steel	1.0	n/a	7	n/a	64.86	n/a
23	Glass	1.4	n/a	3	n/a	17.30	n/a
24	Steel	1.0	n/a	0	n/a	-10.81	n/a
25	Glass	1.4	n/a	2	n/a	6.49	n/a
26	Steel	1.0	n/a	1	n/a	0.00	n/a
27	Glass	1.4	n/a	3	n/a	17.30	n/a
28	Glass	1.4	n/a	4	n/a	28.11	n/a
29	Steel	1.0	n/a	2	n/a	10.81	n/a
30	Glass	1.4	n/a	1	n/a	-4.32	n/a
31	Glass	1.4	n/a	2	n/a	6.49	n/a
32	Drywall	1.0	n/a	3	n/a	21.62	n/a
33	Drywall	1.0	n/a	5	n/a	43.24	n/a
34	Drywall	1.0	n/a	2	n/a	10.81	n/a
				Action Level		100	n/a

Building	5
Survey Unit	24- floors walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/1/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Wood	1.7	n/a	2	n/a	3.22	n/a
2	Drywall	1.4	n/a	1	n/a	-4.30	n/a
3	Wood	1.7	n/a	2	n/a	3.22	n/a
4	Wood	1.7	n/a	2	n/a	3.22	n/a
5	Wood	1.7	n/a	4	n/a	24.72	n/a
6	Drywall	1.4	n/a	3	n/a	17.19	n/a
7	Concrete	1.3	n/a	3	n/a	18.27	n/a
8	Concrete	1.3	n/a	1	n/a	-3.22	n/a
9	Concrete	1.3	n/a	4	n/a	29.02	n/a
10	Concrete	1.3	n/a	2	n/a	7.52	n/a
11	Concrete	1.3	n/a	5	n/a	39.76	n/a
12	Concrete	1.3	n/a	3	n/a	18.27	n/a
13	Concrete	1.3	n/a	3	n/a	18.27	n/a
14	Concrete	1.3	n/a	4	n/a	29.02	n/a
15	Concrete	1.3	n/a	3	n/a	18.27	n/a
16	Concrete	1.3	n/a	4	n/a	29.02	n/a
17	Concrete	1.3	n/a	5	n/a	39.76	n/a
				Action Level		100	n/a

Building	5
Survey Unit	24 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	3/1/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	1	n/a	0.00	n/a
19	Drywall	1.0	n/a	1	n/a	0.00	n/a
20	Drywall	1.0	n/a	5	n/a	43.24	n/a
21	Drywall	1.0	n/a	3	n/a	21.62	n/a
22	Drywall	1.0	n/a	0	n/a	-10.81	n/a
23	Drywall	1.0	n/a	1	n/a	0.00	n/a
24	Drywall	1.0	n/a	2	n/a	10.81	n/a
25	Drywall	1.0	n/a	3	n/a	21.62	n/a
26	Drywall	1.0	n/a	2	n/a	10.81	n/a
27	Steel	1.0	n/a	0	n/a	-10.81	n/a
28	Wood	1.1	n/a	1	n/a	-1.08	n/a
29	Wood	1.1	n/a	1	n/a	-1.08	n/a
30	Steel	1.0	n/a	3	n/a	21.62	n/a
31	Glass	1.4	n/a	1	n/a	-4.32	n/a
32	Glass	1.4	n/a	3	n/a	17.30	n/a
33	Glass	1.4	n/a	1	n/a	-4.32	n/a
34	Steel	1.0	n/a	1	n/a	0.00	n/a
				Action Level		100	n/a

Building	5
Survey Unit	25- floors walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/1/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.4	n/a	4	n/a	27.94	n/a
2	Drywall	1.4	n/a	2	n/a	6.45	n/a
3	Glass	1.5	n/a	2	n/a	5.37	n/a
4	Glass	1.5	n/a	3	n/a	16.12	n/a
5	Steel	1.6	n/a	1	n/a	-6.45	n/a
6	Glass	1.5	n/a	4	n/a	26.87	n/a
7	Drywall	1.4	n/a	3	n/a	17.19	n/a
8	Drywall	1.4	n/a	2	n/a	6.45	n/a
9	Drywall	1.4	n/a	4	n/a	27.94	n/a
10	Drywall	1.4	n/a	2	n/a	6.45	n/a
11	Drywall	1.4	n/a	4	n/a	27.94	n/a
12	Drywall	1.4	n/a	3	n/a	17.19	n/a
13	Drywall	1.4	n/a	1	n/a	-4.30	n/a
14	Concrete	1.3	n/a	1	n/a	-3.22	n/a
15	Concrete	1.3	n/a	5	n/a	39.76	n/a
16	Concrete	1.3	n/a	2	n/a	7.52	n/a
17	Concrete	1.3	n/a	4	n/a	29.02	n/a
				Action Level		100	n/a

Building	5
Survey Unit	25 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	3/1/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Steel	1.0	n/a	0	n/a	-10.81	n/a
19	Drywall	1.0	n/a	4	n/a	32.43	n/a
20	Drywall	1.0	n/a	1	n/a	0.00	n/a
21	Glass	1.4	n/a	3	n/a	17.30	n/a
22	Glass	1.4	n/a	5	n/a	38.92	n/a
23	Glass	1.4	n/a	2	n/a	6.49	n/a
24	Drywall	1.0	n/a	4	n/a	32.43	n/a
25	Drywall	1.0	n/a	2	n/a	10.81	n/a
26	Drywall	1.0	n/a	4	n/a	32.43	n/a
27	Drywall	1.0	n/a	7	n/a	64.86	n/a
28	Drywall	1.0	n/a	4	n/a	32.43	n/a
29	Drywall	1.0	n/a	5	n/a	43.24	n/a
30	Drywall	1.0	n/a	3	n/a	21.62	n/a
31	Steel	1.0	n/a	1	n/a	0.00	n/a
32	Glass	1.4	n/a	2	n/a	6.49	n/a
33	Glass	1.4	n/a	2	n/a	6.49	n/a
34	Glass	1.4	n/a	1	n/a	-4.32	n/a
				Action Level		100	n/a

Building	5
Survey Unit	26- walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/14/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Glass	1.4	n/a	1	n/a	-4.32	n/a
2	Steel	1.0	n/a	2	n/a	10.81	n/a
3	Steel	1.0	n/a	2	n/a	10.81	n/a
4	Drywall	1.0	n/a	3	n/a	21.62	n/a
5	Glass	1.4	n/a	2	n/a	6.49	n/a
6	Glass	1.4	n/a	2	n/a	6.49	n/a
7	Glass	1.4	n/a	3	n/a	17.30	n/a
8	Glass	1.4	n/a	2	n/a	6.49	n/a
9	Glass	1.4	n/a	1	n/a	-4.32	n/a
10	Concrete	1.1	n/a	1	n/a	-1.08	n/a
11	Concrete	1.1	n/a	0	n/a	-11.89	n/a
12	Concrete	1.1	n/a	3	n/a	20.54	n/a
13	Concrete	1.1	n/a	1	n/a	-1.08	n/a
14	Concrete	1.1	n/a	3	n/a	20.54	n/a
15	Concrete	1.1	n/a	4	n/a	31.35	n/a
16	Concrete	1.1	n/a	2	n/a	9.73	n/a
17	Concrete	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	26 - floor
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/14/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.1	n/a	1	n/a	-1.08	n/a
19	Concrete	1.1	n/a	2	n/a	9.73	n/a
20	Concrete	1.1	n/a	3	n/a	20.54	n/a
21	Concrete	1.1	n/a	4	n/a	31.35	n/a
22	Concrete	1.1	n/a	2	n/a	9.73	n/a
23	Concrete	1.1	n/a	2	n/a	9.73	n/a
24	Concrete	1.1	n/a	3	n/a	20.54	n/a
25	Concrete	1.1	n/a	4	n/a	31.35	n/a
26	Concrete	1.1	n/a	2	n/a	9.73	n/a
27	Concrete	1.1	n/a	1	n/a	-1.08	n/a
28	Concrete	1.1	n/a	5	n/a	42.16	n/a
29	Concrete	1.1	n/a	2	n/a	9.73	n/a
30	Concrete	1.1	n/a	3	n/a	20.54	n/a
31	Concrete	1.1	n/a	12	n/a	117.84	n/a
32	Concrete	1.1	n/a	4	n/a	31.35	n/a
33	Concrete	1.1	n/a	4	n/a	31.35	n/a
34	Concrete	1.1	n/a	2	n/a	9.73	n/a
35	Concrete	1.1	n/a	1	n/a	-1.08	n/a
36	Concrete	1.1	n/a	2	n/a	9.73	n/a
37	Concrete	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	26 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/18/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
38	Concrete	1.1	n/a	3	n/a	20.54	n/a
39	Concrete	1.1	n/a	2	n/a	9.73	n/a
40	Concrete	1.1	n/a	3	n/a	20.54	n/a
41	Concrete	1.1	n/a	2	n/a	9.73	n/a
42	Concrete	1.1	n/a	2	n/a	9.73	n/a
43	Concrete	1.1	n/a	0	n/a	-11.89	n/a
44	Wood	1.1	n/a	1	n/a	-1.08	n/a
45	Glass	1.4	n/a	2	n/a	6.49	n/a
46	Steel	1.0	n/a	4	n/a	32.43	n/a
47	Glass	1.4	n/a	4	n/a	28.11	n/a
48	Glass	1.4	n/a	2	n/a	6.49	n/a
49	Wood	1.1	n/a	3	n/a	20.54	n/a
50	Wood	1.1	n/a	2	n/a	9.73	n/a
51	Wood	1.1	n/a	0	n/a	-11.89	n/a
52	Wood	1.1	n/a	2	n/a	9.73	n/a
53	Wood	1.1	n/a	1	n/a	-1.08	n/a
54	Wood	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	27- floors walls
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/18/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Wood	1.1	n/a	1	n/a	-1.08	n/a
2	Wood	1.1	n/a	3	n/a	20.54	n/a
3	Drywall	1.0	n/a	1	n/a	0.00	n/a
4	Drywall	1.0	n/a	2	n/a	10.81	n/a
5	Drywall	1.0	n/a	2	n/a	10.81	n/a
6	Concrete	1.1	n/a	1	n/a	-1.08	n/a
7	Concrete	1.1	n/a	1	n/a	-1.08	n/a
8	Wood	1.1	n/a	3	n/a	20.54	n/a
9	Wood	1.1	n/a	5	n/a	42.16	n/a
10	Wood	1.1	n/a	2	n/a	9.73	n/a
11	Wood	1.1	n/a	2	n/a	9.73	n/a
12	Wood	1.1	n/a	1	n/a	-1.08	n/a
13	Wood	1.1	n/a	1	n/a	-1.08	n/a
14	Wood	1.1	n/a	4	n/a	31.35	n/a
15	Wood	1.1	n/a	1	n/a	-1.08	n/a
16	Wood	1.1	n/a	2	n/a	9.73	n/a
17	Wood	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	28 - floors
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	6	n/a	36.92	n/a
2	Concrete	2.4	n/a	2	n/a	-4.10	n/a
3	Concrete	2.4	n/a	6	n/a	36.92	n/a
4	Concrete	2.4	n/a	4	n/a	16.41	n/a
5	Concrete	2.4	n/a	5	n/a	26.67	n/a
6	Concrete	2.4	n/a	3	n/a	6.15	n/a
7	Concrete	2.4	n/a	3	n/a	6.15	n/a
8	Concrete	2.4	n/a	3	n/a	6.15	n/a
9	Concrete	2.4	n/a	3	n/a	6.15	n/a
10	Concrete	2.4	n/a	3	n/a	6.15	n/a
11	Concrete	2.4	n/a	6	n/a	36.92	n/a
12	Concrete	2.4	n/a	5	n/a	26.67	n/a
13	Concrete	2.4	n/a	3	n/a	6.15	n/a
14	Concrete	2.4	n/a	1	n/a	-14.36	n/a
15	Concrete	2.4	n/a	3	n/a	6.15	n/a
16	Concrete	2.4	n/a	4	n/a	16.41	n/a
17	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	29 - floors
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	3	n/a	6.15	n/a
2	Concrete	2.4	n/a	2	n/a	-4.10	n/a
3	Concrete	2.4	n/a	4	n/a	16.41	n/a
4	Concrete	2.4	n/a	4	n/a	16.41	n/a
5	Concrete	2.4	n/a	4	n/a	16.41	n/a
6	Concrete	2.4	n/a	4	n/a	16.41	n/a
7	Concrete	2.4	n/a	2	n/a	-4.10	n/a
8	Concrete	2.4	n/a	3	n/a	6.15	n/a
9	Concrete	2.4	n/a	4	n/a	16.41	n/a
10	Concrete	2.4	n/a	4	n/a	16.41	n/a
11	Concrete	2.4	n/a	4	n/a	16.41	n/a
12	Concrete	2.4	n/a	4	n/a	16.41	n/a
13	Concrete	2.4	n/a	2	n/a	-4.10	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	5	n/a	26.67	n/a
16	Concrete	2.4	n/a	5	n/a	26.67	n/a
17	Concrete	2.4	n/a	4	n/a	16.41	n/a
				Action Level		100	n/a

Building	5
Survey Unit	30 - floors
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	5	n/a	26.67	n/a
2	Concrete	2.4	n/a	2	n/a	-4.10	n/a
3	Concrete	2.4	n/a	4	n/a	16.41	n/a
4	Concrete	2.4	n/a	1	n/a	-14.36	n/a
5	Concrete	2.4	n/a	4	n/a	16.41	n/a
6	Concrete	2.4	n/a	1	n/a	-14.36	n/a
7	Concrete	2.4	n/a	5	n/a	26.67	n/a
8	Concrete	2.4	n/a	4	n/a	16.41	n/a
9	Concrete	2.4	n/a	3	n/a	6.15	n/a
10	Concrete	2.4	n/a	9	n/a	67.69	n/a
11	Concrete	2.4	n/a	3	n/a	6.15	n/a
12	Concrete	2.4	n/a	3	n/a	6.15	n/a
13	Concrete	2.4	n/a	2	n/a	-4.10	n/a
14	Concrete	2.4	n/a	4	n/a	16.41	n/a
15	Concrete	2.4	n/a	2	n/a	-4.10	n/a
16	Concrete	2.4	n/a	2	n/a	-4.10	n/a
17	Concrete	2.4	n/a	2	n/a	-4.10	n/a
				Action Level		100	n/a

Building	5
Survey Unit	30 - walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	2.4	n/a	2	n/a	-4.10	n/a
19	Concrete	2.4	n/a	3	n/a	6.15	n/a
20	Concrete	2.4	n/a	2	n/a	-4.10	n/a
21	Concrete	2.4	n/a	3	n/a	6.15	n/a
22	Concrete	2.4	n/a	5	n/a	26.67	n/a
23	Concrete	2.4	n/a	5	n/a	26.67	n/a
24	Concrete	2.4	n/a	3	n/a	6.15	n/a
25	Concrete	2.4	n/a	5	n/a	26.67	n/a
26	Concrete	2.4	n/a	11	n/a	88.21	n/a
27	Concrete	2.4	n/a	1	n/a	-14.36	n/a
28	Concrete	2.4	n/a	3	n/a	6.15	n/a
29	Concrete	2.4	n/a	2	n/a	-4.10	n/a
30	Concrete	2.4	n/a	5	n/a	26.67	n/a
31	Concrete	2.4	n/a	3	n/a	6.15	n/a
32	Concrete	2.4	n/a	7	n/a	47.18	n/a
33	Concrete	2.4	n/a	6	n/a	36.92	n/a
34	Concrete	2.4	n/a	6	n/a	36.92	n/a
35	Concrete	2.4	n/a	7	n/a	47.18	n/a
				Action Level		100	n/a

Building	5
Survey Unit	30 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
36	Concrete	2.4	n/a	4	n/a	16.41	n/a
37	Concrete	2.4	n/a	4	n/a	16.41	n/a
38	Concrete	2.4	n/a	3	n/a	6.15	n/a
39	Concrete	2.4	n/a	5	n/a	26.67	n/a
40	Concrete	2.4	n/a	3	n/a	6.15	n/a
41	Concrete	2.4	n/a	4	n/a	16.41	n/a
42	Concrete	2.4	n/a	6	n/a	36.92	n/a
43	Concrete	2.4	n/a	2	n/a	-4.10	n/a
44	Concrete	2.4	n/a	1	n/a	-14.36	n/a
45	Concrete	2.4	n/a	2	n/a	-4.10	n/a
46	Concrete	2.4	n/a	7	n/a	47.18	n/a
47	Concrete	2.4	n/a	2	n/a	-4.10	n/a
48	Concrete	2.4	n/a	2	n/a	-4.10	n/a
49	Concrete	2.4	n/a	3	n/a	6.15	n/a
50	Concrete	2.4	n/a	2	n/a	-4.10	n/a
51	Concrete	2.4	n/a	4	n/a	16.41	n/a
52	Concrete	2.4	n/a	3	n/a	6.15	n/a
53	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	31 - floors
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	6	n/a	36.92	n/a
2	Concrete	2.4	n/a	3	n/a	6.15	n/a
3	Concrete	2.4	n/a	5	n/a	26.67	n/a
4	Concrete	2.4	n/a	7	n/a	47.18	n/a
5	Concrete	2.4	n/a	4	n/a	16.41	n/a
6	Concrete	2.4	n/a	8	n/a	57.44	n/a
7	Concrete	2.4	n/a	5	n/a	26.67	n/a
8	Concrete	2.4	n/a	5	n/a	26.67	n/a
9	Concrete	2.4	n/a	4	n/a	16.41	n/a
10	Concrete	2.4	n/a	3	n/a	6.15	n/a
11	Concrete	2.4	n/a	3	n/a	6.15	n/a
12	Concrete	2.4	n/a	3	n/a	6.15	n/a
13	Concrete	2.4	n/a	7	n/a	47.18	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	3	n/a	6.15	n/a
16	Concrete	2.4	n/a	4	n/a	16.41	n/a
17	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	31 - walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	2.4	n/a	5	n/a	26.67	n/a
19	Concrete	2.4	n/a	6	n/a	36.92	n/a
20	Concrete	2.4	n/a	3	n/a	6.15	n/a
21	Concrete	2.4	n/a	5	n/a	26.67	n/a
22	Concrete	2.4	n/a	5	n/a	26.67	n/a
23	Concrete	2.4	n/a	2	n/a	-4.10	n/a
24	Concrete	2.4	n/a	3	n/a	6.15	n/a
25	Concrete	2.4	n/a	4	n/a	16.41	n/a
26	Concrete	2.4	n/a	2	n/a	-4.10	n/a
27	Concrete	2.4	n/a	4	n/a	16.41	n/a
28	Concrete	2.4	n/a	2	n/a	-4.10	n/a
29	Concrete	2.4	n/a	2	n/a	-4.10	n/a
30	Concrete	2.4	n/a	5	n/a	26.67	n/a
31	Concrete	2.4	n/a	6	n/a	36.92	n/a
32	Concrete	2.4	n/a	3	n/a	6.15	n/a
33	Concrete	2.4	n/a	6	n/a	36.92	n/a
34	Concrete	2.4	n/a	5	n/a	26.67	n/a
				Action Level		100	n/a

Building	5
Survey Unit	31 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Concrete	2.4	n/a	2	n/a	-4.10	n/a
36	Concrete	2.4	n/a	3	n/a	6.15	n/a
37	Concrete	2.4	n/a	1	n/a	-14.36	n/a
38	Concrete	2.4	n/a	3	n/a	6.15	n/a
39	Concrete	2.4	n/a	2	n/a	-4.10	n/a
40	Concrete	2.4	n/a	5	n/a	26.67	n/a
41	Concrete	2.4	n/a	3	n/a	6.15	n/a
42	Concrete	2.4	n/a	3	n/a	6.15	n/a
43	Concrete	2.4	n/a	2	n/a	-4.10	n/a
44	Concrete	2.4	n/a	4	n/a	16.41	n/a
45	Concrete	2.4	n/a	4	n/a	16.41	n/a
46	Concrete	2.4	n/a	3	n/a	6.15	n/a
47	Concrete	2.4	n/a	1	n/a	-14.36	n/a
48	Concrete	2.4	n/a	3	n/a	6.15	n/a
49	Concrete	2.4	n/a	4	n/a	16.41	n/a
50	Concrete	2.4	n/a	4	n/a	16.41	n/a
51	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	32 - floors
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	6	n/a	36.92	n/a
2	Concrete	2.4	n/a	4	n/a	16.41	n/a
3	Concrete	2.4	n/a	3	n/a	6.15	n/a
4	Concrete	2.4	n/a	4	n/a	16.41	n/a
5	Concrete	2.4	n/a	6	n/a	36.92	n/a
6	Concrete	2.4	n/a	3	n/a	6.15	n/a
7	Concrete	2.4	n/a	5	n/a	26.67	n/a
8	Concrete	2.4	n/a	6	n/a	36.92	n/a
9	Concrete	2.4	n/a	4	n/a	16.41	n/a
10	Concrete	2.4	n/a	2	n/a	-4.10	n/a
11	Concrete	2.4	n/a	4	n/a	16.41	n/a
12	Concrete	2.4	n/a	6	n/a	36.92	n/a
13	Concrete	2.4	n/a	3	n/a	6.15	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	4	n/a	16.41	n/a
16	Concrete	2.4	n/a	5	n/a	26.67	n/a
17	Concrete	2.4	n/a	4	n/a	16.41	n/a
18	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	33 - floors
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	4	n/a	16.41	n/a
2	Concrete	2.4	n/a	8	n/a	57.44	n/a
3	Concrete	2.4	n/a	5	n/a	26.67	n/a
4	Concrete	2.4	n/a	3	n/a	6.15	n/a
5	Concrete	2.4	n/a	5	n/a	26.67	n/a
6	Concrete	2.4	n/a	8	n/a	57.44	n/a
7	Concrete	2.4	n/a	5	n/a	26.67	n/a
8	Concrete	2.4	n/a	5	n/a	26.67	n/a
9	Concrete	2.4	n/a	4	n/a	16.41	n/a
10	Concrete	2.4	n/a	7	n/a	47.18	n/a
11	Concrete	2.4	n/a	3	n/a	6.15	n/a
12	Concrete	2.4	n/a	3	n/a	6.15	n/a
13	Concrete	2.4	n/a	4	n/a	16.41	n/a
14	Concrete	2.4	n/a	5	n/a	26.67	n/a
15	Concrete	2.4	n/a	4	n/a	16.41	n/a
16	Concrete	2.4	n/a	2	n/a	-4.10	n/a
17	Concrete	2.4	n/a	5	n/a	26.67	n/a
				Action Level		100	n/a

Building	5
Survey Unit	33 - walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	2.4	n/a	5	n/a	26.67	n/a
19	Concrete	2.4	n/a	7	n/a	47.18	n/a
20	Concrete	2.4	n/a	6	n/a	36.92	n/a
21	Concrete	2.4	n/a	6	n/a	36.92	n/a
22	Concrete	2.4	n/a	5	n/a	26.67	n/a
23	Concrete	2.4	n/a	4	n/a	16.41	n/a
24	Concrete	2.4	n/a	5	n/a	26.67	n/a
25	Concrete	2.4	n/a	3	n/a	6.15	n/a
26	Concrete	2.4	n/a	7	n/a	47.18	n/a
27	Concrete	2.4	n/a	6	n/a	36.92	n/a
28	Concrete	2.4	n/a	4	n/a	16.41	n/a
29	Concrete	2.4	n/a	5	n/a	26.67	n/a
30	Concrete	2.4	n/a	2	n/a	-4.10	n/a
31	Concrete	2.4	n/a	4	n/a	16.41	n/a
32	Concrete	2.4	n/a	6	n/a	36.92	n/a
33	Concrete	2.4	n/a	7	n/a	47.18	n/a
34	Concrete	2.4	n/a	4	n/a	16.41	n/a
				Action Level		100	n/a

Building	5
Survey Unit	33 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Concrete	2.4	n/a	3	n/a	6.15	n/a
36	Concrete	2.4	n/a	4	n/a	16.41	n/a
37	Concrete	2.4	n/a	2	n/a	-4.10	n/a
38	Concrete	2.4	n/a	3	n/a	6.15	n/a
39	Concrete	2.4	n/a	5	n/a	26.67	n/a
40	Concrete	2.4	n/a	5	n/a	26.67	n/a
41	Concrete	2.4	n/a	2	n/a	-4.10	n/a
42	Concrete	2.4	n/a	4	n/a	16.41	n/a
43	Concrete	2.4	n/a	4	n/a	16.41	n/a
44	Concrete	2.4	n/a	2	n/a	-4.10	n/a
45	Concrete	2.4	n/a	3	n/a	6.15	n/a
46	Concrete	2.4	n/a	1	n/a	-14.36	n/a
47	Concrete	2.4	n/a	2	n/a	-4.10	n/a
48	Concrete	2.4	n/a	2	n/a	-4.10	n/a
49	Concrete	2.4	n/a	2	n/a	-4.10	n/a
50	Concrete	2.4	n/a	3	n/a	6.15	n/a
51	Concrete	2.4	n/a	2	n/a	-4.10	n/a
				Action Level		100	n/a

Building	5
Survey Unit	34 - walls
Class	2
Model 2221	148426
Detector 43-68	149773
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.394
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.400
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.6	n/a	1	n/a	-16.25	n/a
2	Concrete	2.6	n/a	5	n/a	24.37	n/a
3	Concrete	2.6	n/a	2	n/a	-6.09	n/a
4	Concrete	2.6	n/a	4	n/a	14.22	n/a
5	Concrete	2.6	n/a	2	n/a	-6.09	n/a
6	Concrete	2.6	n/a	2	n/a	-6.09	n/a
7	Concrete	2.6	n/a	3	n/a	4.06	n/a
8	Concrete	2.6	n/a	1	n/a	-16.25	n/a
9	Concrete						
10	Concrete						
11	Concrete						
12	Concrete						
13	Concrete	See Floors Survey					
14	Concrete						
15	Concrete						
16	Concrete						
17	Concrete						
				Action Level		100	n/a

Building	5
Survey Unit	34 - floors
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete						
2	Concrete						
3	Concrete						
4	Concrete	See Walls Survey					
5	Concrete						
6	Concrete						
7	Concrete						
8	Concrete						
9	Concrete	2.4	n/a	2	n/a	-4.10	n/a
10	Concrete	2.4	n/a	2	n/a	-4.10	n/a
11	Concrete	2.4	n/a	4	n/a	16.41	n/a
12	Concrete	2.4	n/a	4	n/a	16.41	n/a
13	Concrete	2.4	n/a	3	n/a	6.15	n/a
14	Concrete	2.4	n/a	4	n/a	16.41	n/a
15	Concrete	2.4	n/a	3	n/a	6.15	n/a
16	Concrete	2.4	n/a	4	n/a	16.41	n/a
17	Concrete	2.4	n/a	5	n/a	26.67	n/a
				Action Level		100	n/a

Building	5
Survey Unit	35 - floors walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	2	n/a	-4.10	n/a
2	Concrete	2.4	n/a	3	n/a	6.15	n/a
3	Concrete	2.4	n/a	1	n/a	-14.36	n/a
4	Concrete	2.4	n/a	2	n/a	-4.10	n/a
5	Concrete	2.4	n/a	7	n/a	47.18	n/a
6	Concrete	2.4	n/a	3	n/a	6.15	n/a
7	Concrete	2.4	n/a	2	n/a	-4.10	n/a
8	Concrete	2.4	n/a	4	n/a	16.41	n/a
9	Concrete	2.4	n/a	4	n/a	16.41	n/a
10	Concrete	2.4	n/a	3	n/a	6.15	n/a
11	Concrete	2.4	n/a	5	n/a	26.67	n/a
12	Concrete	2.4	n/a	3	n/a	6.15	n/a
13	Concrete	2.4	n/a	3	n/a	6.15	n/a
14	Concrete	2.4	n/a	0	n/a	-24.62	n/a
15	Concrete	2.4	n/a	3	n/a	6.15	n/a
16	Concrete	2.4	n/a	5	n/a	26.67	n/a
17	Concrete	2.4	n/a	6	n/a	36.92	n/a
18	Concrete	2.4	n/a	5	n/a	26.67	n/a
				Action Level		100	n/a

Building	5
Survey Unit	35 - overheads
Class	2
Model 2221	148426
Detector 43-68	149773
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.394
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.400
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Concrete						
20	Concrete						
21	Concrete	See Jan 10 Survey					
22	Concrete						
23	Concrete	2.6	n/a	4	n/a	14.22	n/a
24	Concrete	2.6	n/a	3	n/a	4.06	n/a
25	Concrete	2.6	n/a	2	n/a	-6.09	n/a
26	Concrete	2.6	n/a	5	n/a	24.37	n/a
27	Concrete	2.6	n/a	3	n/a	4.06	n/a
28	Concrete	2.6	n/a	1	n/a	-16.25	n/a
29	Concrete	2.6	n/a	2	n/a	-6.09	n/a
30	Concrete	2.6	n/a	3	n/a	4.06	n/a
31	Concrete	2.6	n/a	5	n/a	24.37	n/a
32	Concrete	2.6	n/a	7	n/a	44.68	n/a
33	Concrete						
34	Concrete	See Jan 10 Survey					
35	Concrete						
36	Concrete						
				Action Level		100	n/a

Building	5
Survey Unit	35 - overheads
Class	2
Model 2221	183984
Detector 43-68	149773
Date	1/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.394
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.400
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Concrete	2.6	n/a	3	n/a	4.06	n/a
20	Concrete	2.6	n/a	1	n/a	-16.25	n/a
21	Concrete	2.6	n/a	4	n/a	14.22	n/a
22	Concrete	2.6	n/a	1	n/a	-16.25	n/a
23	Concrete						
24	Concrete						
25	Concrete						
26	Concrete						
27	Concrete						
28	Concrete	See Jan 6 Survey					
29	Concrete						
30	Concrete						
31	Concrete						
32	Concrete						
33	Concrete	2.6	n/a	2	n/a	-6.09	n/a
34	Concrete	2.6	n/a	2	n/a	-6.09	n/a
35	Concrete	2.6	n/a	3	n/a	4.06	n/a
36	Concrete	2.6	n/a	3	n/a	4.06	n/a
				Action Level		100	n/a

Building	5
Survey Unit	36 - floors walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	3	n/a	6.15	n/a
2	Concrete	2.4	n/a	2	n/a	-4.10	n/a
3	Concrete	2.4	n/a	6	n/a	36.92	n/a
4	Concrete	2.4	n/a	4	n/a	16.41	n/a
5	Concrete	2.4	n/a	2	n/a	-4.10	n/a
6	Concrete	2.4	n/a	2	n/a	-4.10	n/a
7	Concrete	2.4	n/a	3	n/a	6.15	n/a
8	Concrete	2.4	n/a	4	n/a	16.41	n/a
9	Concrete	2.4	n/a	5	n/a	26.67	n/a
10	Concrete	2.4	n/a	6	n/a	36.92	n/a
11	Concrete	2.4	n/a	1	n/a	-14.36	n/a
12	Concrete	2.4	n/a	2	n/a	-4.10	n/a
13	Concrete	2.4	n/a	6	n/a	36.92	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	4	n/a	16.41	n/a
16	Concrete	2.4	n/a	2	n/a	-4.10	n/a
17	Concrete	2.4	n/a	3	n/a	6.15	n/a
18	Concrete	2.4	n/a	4	n/a	16.41	n/a
				Action Level		100	n/a

Building	5
Survey Unit	36 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Concrete	2.4	n/a	3	n/a	6.15	n/a
20	Concrete	2.4	n/a	2	n/a	-4.10	n/a
21	Concrete	2.4	n/a	3	n/a	6.15	n/a
22	Concrete	2.4	n/a	3	n/a	6.15	n/a
23	Concrete	2.4	n/a	2	n/a	-4.10	n/a
24	Concrete	2.4	n/a	3	n/a	6.15	n/a
25	Concrete	2.4	n/a	3	n/a	6.15	n/a
26	Concrete	2.4	n/a	4	n/a	16.41	n/a
27	Concrete	2.4	n/a	2	n/a	-4.10	n/a
28	Concrete	2.4	n/a	2	n/a	-4.10	n/a
29	Concrete	2.4	n/a	2	n/a	-4.10	n/a
30	Concrete	2.4	n/a	4	n/a	16.41	n/a
31	Concrete	2.4	n/a	1	n/a	-14.36	n/a
32	Concrete	2.4	n/a	3	n/a	6.15	n/a
33	Concrete	2.4	n/a	5	n/a	26.67	n/a
34	Concrete	2.4	n/a	4	n/a	16.41	n/a
35	Concrete	2.4	n/a	2	n/a	-4.10	n/a
36	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	37 - floors walls
Class	1
Model 2221	148426
Detector 43-68	149773
Date	1/6/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.394
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.400
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.6	n/a	3	n/a	4.06	n/a
2	Concrete	2.6	n/a	7	n/a	44.68	n/a
3	Concrete	2.6	n/a	8	n/a	54.84	n/a
4	Concrete	2.6	n/a	6	n/a	34.53	n/a
5	Concrete	2.6	n/a	2	n/a	-6.09	n/a
6	Concrete	2.6	n/a	3	n/a	4.06	n/a
7	Concrete	2.6	n/a	2	n/a	-6.09	n/a
8	Concrete	2.6	n/a	4	n/a	14.22	n/a
9	Concrete	2.6	n/a	4	n/a	14.22	n/a
10	Concrete	2.6	n/a	2	n/a	-6.09	n/a
11	Concrete	2.6	n/a	4	n/a	14.22	n/a
12	Concrete	2.6	n/a	3	n/a	4.06	n/a
13	Concrete	2.6	n/a	7	n/a	44.68	n/a
14	Concrete	2.6	n/a	4	n/a	14.22	n/a
15	Concrete	2.6	n/a	4	n/a	14.22	n/a
16	Concrete	2.6	n/a	4	n/a	14.22	n/a
17	Concrete	2.6	n/a	5	n/a	24.37	n/a
				Action Level		100	n/a

Building	5
Survey Unit	37 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	2.4	n/a	4	n/a	16.41	n/a
19	Concrete	2.4	n/a	3	n/a	6.15	n/a
20	Concrete	2.4	n/a	2	n/a	-4.10	n/a
21	Concrete	2.4	n/a	2	n/a	-4.10	n/a
22	Concrete	2.4	n/a	2	n/a	-4.10	n/a
23	Concrete	2.4	n/a	2	n/a	-4.10	n/a
24	Concrete	2.4	n/a	3	n/a	6.15	n/a
25	Concrete	2.4	n/a	3	n/a	6.15	n/a
26	Concrete	2.4	n/a	3	n/a	6.15	n/a
27	Concrete	2.4	n/a	2	n/a	-4.10	n/a
28	Concrete	2.4	n/a	2	n/a	-4.10	n/a
29	Concrete	2.4	n/a	4	n/a	16.41	n/a
30	Concrete	2.4	n/a	2	n/a	-4.10	n/a
31	Concrete	2.4	n/a	3	n/a	6.15	n/a
32	Concrete	2.4	n/a	3	n/a	6.15	n/a
33	Concrete	2.4	n/a	3	n/a	6.15	n/a
34	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	38 - floors walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/11/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Steel	3.2	n/a	2	n/a	-12.31	n/a
2	Steel	3.2	n/a	4	n/a	8.21	n/a
3	Concrete	2.4	n/a	2	n/a	-4.10	n/a
4	Concrete	2.4	n/a	5	n/a	26.67	n/a
5	Concrete	2.4	n/a	5	n/a	26.67	n/a
6	Concrete	2.4	n/a	4	n/a	16.41	n/a
7	Concrete	2.4	n/a	3	n/a	6.15	n/a
8	Concrete	2.4	n/a	1	n/a	-14.36	n/a
9	Concrete	2.4	n/a	3	n/a	6.15	n/a
10	Concrete	2.4	n/a	1	n/a	-14.36	n/a
11	Concrete	2.4	n/a	5	n/a	26.67	n/a
12	Concrete	2.4	n/a	3	n/a	6.15	n/a
13	Concrete	2.4	n/a	3	n/a	6.15	n/a
14	Concrete	2.4	n/a	5	n/a	26.67	n/a
15	Concrete	2.4	n/a	5	n/a	26.67	n/a
16	Concrete	2.4	n/a	5	n/a	26.67	n/a
17	Concrete	2.4	n/a	5	n/a	26.67	n/a
				Action Level		100	n/a

Building	5
Survey Unit	38 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/11/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	2.4	n/a	6	n/a	36.92	n/a
19	Concrete	2.4	n/a	4	n/a	16.41	n/a
20	Concrete	2.4	n/a	5	n/a	26.67	n/a
21	Concrete	2.4	n/a	3	n/a	6.15	n/a
22	Concrete	2.4	n/a	4	n/a	16.41	n/a
23	Concrete	2.4	n/a	6	n/a	36.92	n/a
24	Concrete	2.4	n/a	6	n/a	36.92	n/a
25	Concrete	2.4	n/a	4	n/a	16.41	n/a
26	Concrete	2.4	n/a	6	n/a	36.92	n/a
27	Concrete	2.4	n/a	4	n/a	16.41	n/a
28	Concrete	2.4	n/a	4	n/a	16.41	n/a
29	Concrete	2.4	n/a	1	n/a	-14.36	n/a
30	Concrete	2.4	n/a	5	n/a	26.67	n/a
31	Concrete	2.4	n/a	3	n/a	6.15	n/a
32	Steel	3.2	n/a	2	n/a	-12.31	n/a
33	Steel	3.2	n/a	1	n/a	-22.56	n/a
34	Steel	3.2	n/a	3	n/a	-2.05	n/a
				Action Level		100	n/a

Building	5
Survey Unit	39 - walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	3	n/a	6.15	n/a
2	Concrete	2.4	n/a	4	n/a	16.41	n/a
3	Concrete	2.4	n/a	3	n/a	6.15	n/a
4	Concrete	2.4	n/a	2	n/a	-4.10	n/a
5	Concrete	2.4	n/a	2	n/a	-4.10	n/a
6	Concrete	2.4	n/a	6	n/a	36.92	n/a
7	Concrete	2.4	n/a	1	n/a	-14.36	n/a
8	Concrete	2.4	n/a	2	n/a	-4.10	n/a
9	Concrete	2.4	n/a	2	n/a	-4.10	n/a
10	Concrete	2.4	n/a	3	n/a	6.15	n/a
11	Concrete	2.4	n/a	2	n/a	-4.10	n/a
12	Concrete	2.4	n/a	2	n/a	-4.10	n/a
13	Concrete	2.4	n/a	6	n/a	36.92	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	4	n/a	16.41	n/a
16	Concrete	2.4	n/a	4	n/a	16.41	n/a
17	Concrete	2.4	n/a	6	n/a	36.92	n/a
				Action Level		100	n/a

Building	5
Survey Unit	39 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/10/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	2.4	n/a	7	n/a	47.18	n/a
19	Concrete	2.4	n/a	4	n/a	16.41	n/a
20	Concrete	2.4	n/a	2	n/a	-4.10	n/a
21	Concrete	2.4	n/a	3	n/a	6.15	n/a
22	Concrete	2.4	n/a	2	n/a	-4.10	n/a
23	Concrete	2.4	n/a	0	n/a	-24.62	n/a
24	Concrete	2.4	n/a	3	n/a	6.15	n/a
25	Concrete	2.4	n/a	4	n/a	16.41	n/a
26	Concrete	2.4	n/a	3	n/a	6.15	n/a
27	Concrete	2.4	n/a	4	n/a	16.41	n/a
28	Concrete	2.4	n/a	4	n/a	16.41	n/a
29	Concrete	2.4	n/a	3	n/a	6.15	n/a
30	Concrete	2.4	n/a	5	n/a	26.67	n/a
31	Concrete	2.4	n/a	3	n/a	6.15	n/a
32	Concrete	2.4	n/a	0	n/a	-24.62	n/a
33	Concrete	2.4	n/a	5	n/a	26.67	n/a
34	Concrete	2.4	n/a	2	n/a	-4.10	n/a
				Action Level		100	n/a

Building	5
Survey Unit	40 - floors walls
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/11/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	2	n/a	-4.10	n/a
2	Concrete	2.4	n/a	5	n/a	26.67	n/a
3	Concrete	2.4	n/a	4	n/a	16.41	n/a
4	Concrete	2.4	n/a	4	n/a	16.41	n/a
5	Concrete	2.4	n/a	4	n/a	16.41	n/a
6	Concrete	2.4	n/a	5	n/a	26.67	n/a
7	Concrete	2.4	n/a	4	n/a	16.41	n/a
8	Concrete	2.4	n/a	3	n/a	6.15	n/a
9	Concrete	2.4	n/a	5	n/a	26.67	n/a
10	Concrete	2.4	n/a	4	n/a	16.41	n/a
11	Concrete	2.4	n/a	3	n/a	6.15	n/a
12	Concrete	2.4	n/a	3	n/a	6.15	n/a
13	Concrete	2.4	n/a	3	n/a	6.15	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	4	n/a	16.41	n/a
16	Concrete	2.4	n/a	2	n/a	-4.10	n/a
17	Steel	3.2	n/a	3	n/a	-2.05	n/a
				Action Level		100	n/a

Building	5
Survey Unit	41 - walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/14/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.0	n/a	2	n/a	10.81	n/a
2	Steel	1.0	n/a	3	n/a	21.62	n/a
3	Drywall	1.0	n/a	4	n/a	32.43	n/a
4	Steel	1.0	n/a	2	n/a	10.81	n/a
5	Drywall	1.0	n/a	2	n/a	10.81	n/a
6	Steel	1.0	n/a	0	n/a	-10.81	n/a
7	Steel	1.0	n/a	3	n/a	21.62	n/a
8	Steel	1.0	n/a	2	n/a	10.81	n/a
9	Drywall	1.0	n/a	2	n/a	10.81	n/a
10	Steel	1.0	n/a	1	n/a	0.00	n/a
11	Drywall	1.0	n/a	4	n/a	32.43	n/a
12	Concrete	1.1	n/a	20	n/a	204.32	n/a
13	Glass	1.4	n/a	2	n/a	6.49	n/a
14	Concrete	1.1	n/a	9	n/a	85.41	n/a
15	Glass	1.4	n/a	6	n/a	49.73	n/a
16	Concrete	1.1	n/a	7	n/a	63.78	n/a
17	Glass	1.4	n/a	2	n/a	6.49	n/a
18	Concrete	1.1	n/a	1	n/a	-1.08	n/a
				Action Level		100	n/a

Building	5
Survey Unit	41 - floors
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/15/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Concrete	1.1	n/a	5	n/a	42.16	n/a
20	Concrete	1.1	n/a	1	n/a	-1.08	n/a
21	Concrete	1.1	n/a	1	n/a	-1.08	n/a
22	Concrete	1.1	n/a	2	n/a	9.73	n/a
23	Concrete	1.1	n/a	2	n/a	9.73	n/a
24	Concrete	1.1	n/a	0	n/a	-11.89	n/a
25	Concrete	1.1	n/a	3	n/a	20.54	n/a
26	Concrete	1.1	n/a	3	n/a	20.54	n/a
27	Concrete	1.1	n/a	0	n/a	-11.89	n/a
28	Concrete	1.1	n/a	2	n/a	9.73	n/a
29	Concrete	1.1	n/a	3	n/a	20.54	n/a
30	Concrete	1.1	n/a	4	n/a	31.35	n/a
31	Concrete	1.1	n/a	2	n/a	9.73	n/a
32	Concrete	1.1	n/a	1	n/a	-1.08	n/a
33	Concrete	1.1	n/a	2	n/a	9.73	n/a
34	Concrete	1.1	n/a	5	n/a	42.16	n/a
35	Concrete	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	41 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/28/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
36	Glass	1.4	n/a	2	n/a	6.49	n/a
37	Glass	1.4	n/a	1	n/a	-4.32	n/a
38	Glass	1.4	n/a	4	n/a	28.11	n/a
39	Drywall	1.0	n/a	3	n/a	21.62	n/a
40	Drywall	1.0	n/a	2	n/a	10.81	n/a
41	Drywall	1.0	n/a	3	n/a	21.62	n/a
42	Drywall	1.0	n/a	5	n/a	43.24	n/a
43	Wood	1.1	n/a	1	n/a	-1.08	n/a
44	Wood	1.1	n/a	4	n/a	31.35	n/a
45	Steel	1.0	n/a	7	n/a	64.86	n/a
46	Steel	1.0	n/a	5	n/a	43.24	n/a
47	Steel	1.0	n/a	1	n/a	0.00	n/a
48	Glass	1.4	n/a	5	n/a	38.92	n/a
49	Glass	1.4	n/a	3	n/a	17.30	n/a
50	Glass	1.4	n/a	2	n/a	6.49	n/a
51	Glass	1.4	n/a	5	n/a	38.92	n/a
52	Steel	1.0	n/a	8	n/a	75.68	n/a
				Action Level		100	n/a

Building	5
Survey Unit	42 - walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/15/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Steel	1.0	n/a	1	n/a	0.00	n/a
2	Drywall	1.0	n/a	2	n/a	10.81	n/a
3	Steel	1.0	n/a	1	n/a	0.00	n/a
4	Drywall	1.0	n/a	2	n/a	10.81	n/a
5	Steel	1.0	n/a	4	n/a	32.43	n/a
6	Drywall	1.0	n/a	1	n/a	0.00	n/a
7	Steel	1.0	n/a	2	n/a	10.81	n/a
8	Drywall	1.0	n/a	3	n/a	21.62	n/a
9	Steel	1.0	n/a	2	n/a	10.81	n/a
10	Drywall	1.0	n/a	5	n/a	43.24	n/a
11	Steel	1.0	n/a	0	n/a	-10.81	n/a
12	Drywall	1.0	n/a	2	n/a	10.81	n/a
13	Steel	1.0	n/a	1	n/a	0.00	n/a
14	Wood	1.1	n/a	4	n/a	31.35	n/a
15	Wood	1.1	n/a	2	n/a	9.73	n/a
16	Glass	1.4	n/a	3	n/a	17.30	n/a
17	Wood	1.1	n/a	5	n/a	42.16	n/a
18	Glass	1.4	n/a	1	n/a	-4.32	n/a
19	Wood	1.1	n/a	6	n/a	52.97	n/a
				Action Level		100	n/a

Building	5
Survey Unit	42 - floors
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/15/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
20	Concrete	1.1	n/a	2	n/a	9.73	n/a
21	Concrete	1.1	n/a	4	n/a	31.35	n/a
22	Concrete	1.1	n/a	0	n/a	-11.89	n/a
23	Concrete	1.1	n/a	1	n/a	-1.08	n/a
24	Concrete	1.1	n/a	4	n/a	31.35	n/a
25	Concrete	1.1	n/a	4	n/a	31.35	n/a
26	Concrete	1.1	n/a	2	n/a	9.73	n/a
27	Concrete	1.1	n/a	3	n/a	20.54	n/a
28	Concrete	1.1	n/a	1	n/a	-1.08	n/a
29	Concrete	1.1	n/a	3	n/a	20.54	n/a
30	Concrete	1.1	n/a	5	n/a	42.16	n/a
31	Concrete	1.1	n/a	4	n/a	31.35	n/a
32	Concrete	1.1	n/a	3	n/a	20.54	n/a
33	Concrete	1.1	n/a	4	n/a	31.35	n/a
34	Concrete	1.1	n/a	5	n/a	42.16	n/a
35	Concrete	1.1	n/a	0	n/a	-11.89	n/a
36	Concrete	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	42 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/28/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
37	Drywall	1.0	n/a	5	n/a	43.24	n/a
38	Drywall	1.0	n/a	2	n/a	10.81	n/a
39	Drywall	1.0	n/a	3	n/a	21.62	n/a
40	Drywall	1.0	n/a	3	n/a	21.62	n/a
41	Drywall	1.0	n/a	3	n/a	21.62	n/a
42	Glass	1.4	n/a	5	n/a	38.92	n/a
43	Steel	1.0	n/a	5	n/a	43.24	n/a
44	Glass	1.4	n/a	2	n/a	6.49	n/a
45	Glass	1.4	n/a	2	n/a	6.49	n/a
46	Glass	1.4	n/a	3	n/a	17.30	n/a
47	Glass	1.4	n/a	2	n/a	6.49	n/a
48	Steel	1.0	n/a	2	n/a	10.81	n/a
49	Steel	1.0	n/a	4	n/a	32.43	n/a
50	Steel	1.0	n/a	1	n/a	0.00	n/a
51	Steel	1.0	n/a	5	n/a	43.24	n/a
52	Steel	1.0	n/a	1	n/a	0.00	n/a
53	Steel	1.0	n/a	1	n/a	0.00	n/a
				Action Level		100	n/a

Building	5
Survey Unit	43 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/14/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.1	n/a	2	n/a	9.73	n/a
2	Concrete	1.1	n/a	4	n/a	31.35	n/a
3	Concrete	1.1	n/a	14	n/a	139.46	n/a
4	Concrete	1.1	n/a	11	n/a	107.03	n/a
5	Concrete	1.1	n/a	4	n/a	31.35	n/a
6	Concrete	1.1	n/a	35	n/a	366.49	n/a
7	Concrete	1.1	n/a	7	n/a	63.78	n/a
8	Concrete	1.1	n/a	7	n/a	63.78	n/a
9	Concrete	1.1	n/a	2	n/a	9.73	n/a
10	Concrete	1.1	n/a	5	n/a	42.16	n/a
11	Concrete	1.1	n/a	2	n/a	9.73	n/a
12	Concrete	1.1	n/a	2	n/a	9.73	n/a
13	Concrete	1.1	n/a	2	n/a	9.73	n/a
14	Concrete	1.1	n/a	3	n/a	20.54	n/a
15	Concrete	1.1	n/a	3	n/a	20.54	n/a
16	Concrete	1.1	n/a	3	n/a	20.54	n/a
17	Drywall	1.0	n/a	4	n/a	32.43	n/a
18	Drywall	1.0	n/a	4	n/a	32.43	n/a
				Action Level		100	n/a

Building	5
Survey Unit	43 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	3/1/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Steel	1.0	n/a	1	n/a	0.00	n/a
20	Steel	1.0	n/a	1	n/a	0.00	n/a
21	Steel	1.0	n/a	2	n/a	10.81	n/a
22	Steel	1.0	n/a	4	n/a	32.43	n/a
23	Glass	1.4	n/a	2	n/a	6.49	n/a
24	Glass	1.4	n/a	1	n/a	-4.32	n/a
25	Glass	1.4	n/a	2	n/a	6.49	n/a
26	Glass	1.4	n/a	3	n/a	17.30	n/a
27	Glass	1.4	n/a	2	n/a	6.49	n/a
28	Glass	1.4	n/a	6	n/a	49.73	n/a
29	Glass	1.4	n/a	4	n/a	28.11	n/a
30	Steel	1.0	n/a	2	n/a	10.81	n/a
31	Steel	1.0	n/a	8	n/a	75.68	n/a
32	Steel	1.0	n/a	3	n/a	21.62	n/a
33	Wood	1.1	n/a	7	n/a	63.78	n/a
34	Wood	1.1	n/a	4	n/a	31.35	n/a
35	Wood	1.1	n/a	4	n/a	31.35	n/a
				Action Level		100	n/a

Building	5
Survey Unit	44 - floors
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/15/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.1	n/a	1	n/a	-1.08	n/a
2	Concrete	1.1	n/a	3	n/a	20.54	n/a
3	Concrete	1.1	n/a	2	n/a	9.73	n/a
4	Concrete	1.1	n/a	4	n/a	31.35	n/a
5	Concrete	1.1	n/a	1	n/a	-1.08	n/a
6	Concrete	1.1	n/a	1	n/a	-1.08	n/a
7	Concrete	1.1	n/a	2	n/a	9.73	n/a
8	Concrete	1.1	n/a	4	n/a	31.35	n/a
9	Concrete	1.1	n/a	1	n/a	-1.08	n/a
10	Concrete	1.1	n/a	4	n/a	31.35	n/a
11	Concrete	1.1	n/a	2	n/a	9.73	n/a
12	Concrete	1.1	n/a	3	n/a	20.54	n/a
13	Concrete	1.1	n/a	0	n/a	-11.89	n/a
14	Concrete	1.1	n/a	3	n/a	20.54	n/a
15	Concrete	1.1	n/a	1	n/a	-1.08	n/a
16	Concrete	1.1	n/a	5	n/a	42.16	n/a
17	Concrete	1.1	n/a	1	n/a	-1.08	n/a
				Action Level		100	n/a

Building	5
Survey Unit	44 - walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/15/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Glass	1.4	n/a	4	n/a	28.11	n/a
19	Glass	1.4	n/a	2	n/a	6.49	n/a
20	Glass	1.4	n/a	1	n/a	-4.32	n/a
21	Glass	1.4	n/a	1	n/a	-4.32	n/a
22	Glass	1.4	n/a	3	n/a	17.30	n/a
23	Glass	1.4	n/a	1	n/a	-4.32	n/a
24	Drywall	1.0	n/a	2	n/a	10.81	n/a
25	Concrete	1.1	n/a	2	n/a	9.73	n/a
26	Concrete	1.1	n/a	1	n/a	-1.08	n/a
27	Concrete	1.1	n/a	3	n/a	20.54	n/a
28	Concrete	1.1	n/a	0	n/a	-11.89	n/a
29	Concrete	1.1	n/a	1	n/a	-1.08	n/a
30	Concrete	1.1	n/a	3	n/a	20.54	n/a
31	Concrete	1.1	n/a	4	n/a	31.35	n/a
32	Concrete	1.1	n/a	2	n/a	9.73	n/a
33	Concrete	1.1	n/a	0	n/a	-11.89	n/a
34	Concrete	1.1	n/a	6	n/a	52.97	n/a
35	Concrete	1.1	n/a	3	n/a	20.54	n/a
36	Concrete	1.1	n/a	4	n/a	31.35	n/a
37	Concrete	1.1	n/a	5	n/a	42.16	n/a
38	Drywall	1.0	n/a	5	n/a	43.24	n/a
				Action Level		100	n/a

Building	5
Survey Unit	44 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/28/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
39	Glass	1.4	n/a	2	n/a	6.49	n/a
40	Glass	1.4	n/a	3	n/a	17.30	n/a
41	Glass	1.4	n/a	4	n/a	28.11	n/a
42	Glass	1.4	n/a	5	n/a	38.92	n/a
43	Glass	1.4	n/a	2	n/a	6.49	n/a
44	Wood	1.1	n/a	7	n/a	63.78	n/a
45	Wood	1.1	n/a	2	n/a	9.73	n/a
46	Wood	1.1	n/a	3	n/a	20.54	n/a
47	Wood	1.1	n/a	1	n/a	-1.08	n/a
48	Wood	1.1	n/a	2	n/a	9.73	n/a
49	Steel	1.0	n/a	1	n/a	0.00	n/a
50	Steel	1.0	n/a	5	n/a	43.24	n/a
51	Glass	1.4	n/a	3	n/a	17.30	n/a
52	Glass	1.4	n/a	0	n/a	-15.14	n/a
53	Glass	1.4	n/a	4	n/a	28.11	n/a
54	Glass	1.4	n/a	2	n/a	6.49	n/a
55	Glass	1.4	n/a	1	n/a	-4.32	n/a
				Action Level		100	n/a

Building	5
Survey Unit	45 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/15/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.1	n/a	1	n/a	-1.08	n/a
2	Concrete	1.1	n/a	1	n/a	-1.08	n/a
3	Concrete	1.1	n/a	2	n/a	9.73	n/a
4	Concrete	1.1	n/a	0	n/a	-11.89	n/a
5	Concrete	1.1	n/a	1	n/a	-1.08	n/a
6	Concrete	1.1	n/a	3	n/a	20.54	n/a
7	Concrete	1.1	n/a	5	n/a	42.16	n/a
8	Concrete	1.1	n/a	3	n/a	20.54	n/a
9	Concrete	1.1	n/a	2	n/a	9.73	n/a
10	Concrete	1.1	n/a	3	n/a	20.54	n/a
11	Concrete	1.1	n/a	5	n/a	42.16	n/a
12	Concrete	1.1	n/a	4	n/a	31.35	n/a
13	Steel	1.0	n/a	2	n/a	10.81	n/a
14	Steel	1.0	n/a	3	n/a	21.62	n/a
15	Steel	1.0	n/a	1	n/a	0.00	n/a
16	Wood	1.1	n/a	4	n/a	31.35	n/a
17	Drywall	1.0	n/a	2	n/a	10.81	n/a
				Action Level		100	n/a

Building	5
Survey Unit	45 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/28/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Glass	1.4	n/a	3	n/a	17.30	n/a
19	Glass	1.4	n/a	2	n/a	6.49	n/a
20	Glass	1.4	n/a	5	n/a	38.92	n/a
21	Glass	1.4	n/a	2	n/a	6.49	n/a
22	Glass	1.4	n/a	4	n/a	28.11	n/a
23	Glass	1.4	n/a	1	n/a	-4.32	n/a
24	Drywall	1.0	n/a	4	n/a	32.43	n/a
25	Drywall	1.0	n/a	6	n/a	54.05	n/a
26	Drywall	1.0	n/a	2	n/a	10.81	n/a
27	Glass	1.4	n/a	2	n/a	6.49	n/a
28	Steel	1.0	n/a	2	n/a	10.81	n/a
29	Glass	1.4	n/a	1	n/a	-4.32	n/a
30	Glass	1.4	n/a	4	n/a	28.11	n/a
31	Steel	1.0	n/a	1	n/a	0.00	n/a
32	Glass	1.4	n/a	3	n/a	17.30	n/a
33	Wood	1.1	n/a	2	n/a	9.73	n/a
34	Wood	1.1	n/a	5	n/a	42.16	n/a
35	Wood	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	46 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/21/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Glass	1.4	n/a	1	n/a	-4.32	n/a
2	Wood	1.1	n/a	2	n/a	9.73	n/a
3	Glass	1.4	n/a	5	n/a	38.92	n/a
4	Concrete	1.1	n/a	3	n/a	20.54	n/a
5	Concrete	1.1	n/a	4	n/a	31.35	n/a
6	Concrete	1.1	n/a	2	n/a	9.73	n/a
7	Concrete	1.1	n/a	1	n/a	-1.08	n/a
8	Concrete	1.1	n/a	3	n/a	20.54	n/a
9	Concrete	1.1	n/a	2	n/a	9.73	n/a
10	Concrete	1.1	n/a	2	n/a	9.73	n/a
11	Concrete	1.1	n/a	1	n/a	-1.08	n/a
12	Concrete	1.1	n/a	5	n/a	42.16	n/a
13	Concrete	1.1	n/a	2	n/a	9.73	n/a
14	Concrete	1.1	n/a	4	n/a	31.35	n/a
15	Concrete	1.1	n/a	3	n/a	20.54	n/a
16	Concrete	1.1	n/a	3	n/a	20.54	n/a
17	Concrete	1.1	n/a	4	n/a	31.35	n/a
				Action Level		100	n/a

Building	5
Survey Unit	46 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/21/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.1	n/a	2	n/a	9.73	n/a
19	Concrete	1.1	n/a	3	n/a	20.54	n/a
20	Concrete	1.1	n/a	1	n/a	-1.08	n/a
21	Concrete	1.1	n/a	6	n/a	52.97	n/a
22	Wood	1.1	n/a	5	n/a	42.16	n/a
23	Wood	1.1	n/a	1	n/a	-1.08	n/a
24	Wood	1.1	n/a	1	n/a	-1.08	n/a
25	Wood	1.1	n/a	4	n/a	31.35	n/a
26	Wood	1.1	n/a	7	n/a	63.78	n/a
27	Wood	1.1	n/a	3	n/a	20.54	n/a
28	Wood	1.1	n/a	2	n/a	9.73	n/a
29	Wood	1.1	n/a	0	n/a	-11.89	n/a
30	Wood	1.1	n/a	2	n/a	9.73	n/a
31	Glass	1.4	n/a	3	n/a	17.30	n/a
32	Glass	1.4	n/a	1	n/a	-4.32	n/a
33	Glass	1.4	n/a	2	n/a	6.49	n/a
34	Glass	1.4	n/a	2	n/a	6.49	n/a
				Action Level		100	n/a

Building	5
Survey Unit	47 - floors
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/15/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.1	n/a	2	n/a	9.73	n/a
2	Concrete	1.1	n/a	6	n/a	52.97	n/a
3	Concrete	1.1	n/a	5	n/a	42.16	n/a
4	Concrete	1.1	n/a	7	n/a	63.78	n/a
5	Concrete	1.1	n/a	5	n/a	42.16	n/a
6	Concrete	1.1	n/a	2	n/a	9.73	n/a
7	Concrete	1.1	n/a	4	n/a	31.35	n/a
8	Concrete	1.1	n/a	2	n/a	9.73	n/a
9	Concrete	1.1	n/a	2	n/a	9.73	n/a
10	Concrete	1.1	n/a	1	n/a	-1.08	n/a
11	Concrete	1.1	n/a	2	n/a	9.73	n/a
12	Concrete	1.1	n/a	2	n/a	9.73	n/a
13	Concrete	1.1	n/a	3	n/a	20.54	n/a
14	Concrete	1.1	n/a	2	n/a	9.73	n/a
15	Concrete	1.1	n/a	1	n/a	-1.08	n/a
16	Concrete	1.1	n/a	1	n/a	-1.08	n/a
17	Concrete	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	47 - walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	3/1/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	2	n/a	10.81	n/a
19	Drywall	1.0	n/a	4	n/a	32.43	n/a
20	Glass	1.4	n/a	1	n/a	-4.32	n/a
21	Glass	1.4	n/a	2	n/a	6.49	n/a
22	Drywall	1.0	n/a	1	n/a	0.00	n/a
23	Drywall	1.0	n/a	0	n/a	-10.81	n/a
24	Drywall	1.0	n/a	1	n/a	0.00	n/a
25	Concrete	1.1	n/a	0	n/a	-11.89	n/a
26	Concrete	1.1	n/a	4	n/a	31.35	n/a
27	Drywall	1.0	n/a	6	n/a	54.05	n/a
28	Wood	1.1	n/a	3	n/a	20.54	n/a
29	Wood	1.1	n/a	9	n/a	85.41	n/a
30	Wood	1.1	n/a	8	n/a	74.59	n/a
31	Drywall	1.0	n/a	4	n/a	32.43	n/a
32	Drywall	1.0	n/a	2	n/a	10.81	n/a
33	Wood	1.1	n/a	1	n/a	-1.08	n/a
34	Glass	1.4	n/a	1	n/a	-4.32	n/a
				Action Level		100	n/a

Building	5
Survey Unit	47 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	3/2/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Steel	1.0	n/a	3	n/a	21.62	n/a
36	Steel	1.0	n/a	2	n/a	10.81	n/a
37	Drywall	1.0	n/a	4	n/a	32.43	n/a
38	Drywall	1.0	n/a	7	n/a	64.86	n/a
39	Glass	1.4	n/a	3	n/a	17.30	n/a
40	Glass	1.4	n/a	5	n/a	38.92	n/a
41	Wood	1.1	n/a	2	n/a	9.73	n/a
42	Wood	1.1	n/a	7	n/a	63.78	n/a
43	Wood	1.1	n/a	1	n/a	-1.08	n/a
44	Wood	1.1	n/a	3	n/a	20.54	n/a
45	Steel	1.0	n/a	2	n/a	10.81	n/a
46	Steel	1.0	n/a	4	n/a	32.43	n/a
47	Glass	1.4	n/a	3	n/a	17.30	n/a
48	Glass	1.4	n/a	1	n/a	-4.32	n/a
49	Glass	1.4	n/a	1	n/a	-4.32	n/a
50	Glass	1.4	n/a	6	n/a	49.73	n/a
51	Glass	1.4	n/a	4	n/a	28.11	n/a
				Action Level		100	n/a

Building	5
Survey Unit	48 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.1	n/a	8	n/a	74.59	n/a
2	Concrete	1.1	n/a	2	n/a	9.73	n/a
3	Drywall	1.0	n/a	1	n/a	0.00	n/a
4	Drywall	1.0	n/a	1	n/a	0.00	n/a
5	Drywall	1.0	n/a	2	n/a	10.81	n/a
6	Drywall	1.0	n/a	1	n/a	0.00	n/a
7	Drywall	1.0	n/a	4	n/a	32.43	n/a
8	Drywall	1.0	n/a	2	n/a	10.81	n/a
9	Drywall	1.0	n/a	1	n/a	0.00	n/a
10	Concrete	1.1	n/a	1	n/a	-1.08	n/a
11	Concrete	1.1	n/a	54	n/a	571.89	n/a
12	Concrete	1.1	n/a	7	n/a	63.78	n/a
13	Concrete	1.1	n/a	3	n/a	20.54	n/a
14	Concrete	1.1	n/a	6	n/a	52.97	n/a
15	Concrete	1.1	n/a	5	n/a	42.16	n/a
16	Concrete	1.1	n/a	5	n/a	42.16	n/a
17	Concrete	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	48 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	4	n/a	32.43	n/a
19	Glass	1.4	n/a	2	n/a	6.49	n/a
20	Drywall	1.0	n/a	2	n/a	10.81	n/a
21	Drywall	1.0	n/a	3	n/a	21.62	n/a
22	Drywall	1.0	n/a	1	n/a	0.00	n/a
23	Drywall	1.0	n/a	7	n/a	64.86	n/a
24	Drywall	1.0	n/a	2	n/a	10.81	n/a
25	Glass	1.4	n/a	0	n/a	-15.14	n/a
26	Glass	1.4	n/a	1	n/a	-4.32	n/a
27	Glass	1.4	n/a	3	n/a	17.30	n/a
28	Glass	1.4	n/a	2	n/a	6.49	n/a
29	Drywall	1.0	n/a	4	n/a	32.43	n/a
30	Glass	1.4	n/a	3	n/a	17.30	n/a
31	Drywall	1.0	n/a	2	n/a	10.81	n/a
32	Glass	1.4	n/a	5	n/a	38.92	n/a
33	Glass	1.4	n/a	3	n/a	17.30	n/a
34	Glass	1.4	n/a	2	n/a	6.49	n/a
				Action Level		100	n/a

Building	5
Survey Unit	49 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/18/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Glass	1.4	n/a	1	n/a	-4.32	n/a
2	Wood	1.1	n/a	2	n/a	9.73	n/a
3	Drywall	1.0	n/a	3	n/a	21.62	n/a
4	Drywall	1.0	n/a	2	n/a	10.81	n/a
5	Drywall	1.0	n/a	4	n/a	32.43	n/a
6	Glass	1.4	n/a	1	n/a	-4.32	n/a
7	Concrete	1.1	n/a	2	n/a	9.73	n/a
8	Concrete	1.1	n/a	1	n/a	-1.08	n/a
9	Concrete	1.1	n/a	5	n/a	42.16	n/a
10	Concrete	1.1	n/a	3	n/a	20.54	n/a
11	Concrete	1.1	n/a	3	n/a	20.54	n/a
12	Concrete	1.1	n/a	8	n/a	74.59	n/a
13	Concrete	1.1	n/a	5	n/a	42.16	n/a
14	Concrete	1.1	n/a	2	n/a	9.73	n/a
15	Concrete	1.1	n/a	2	n/a	9.73	n/a
16	Concrete	1.1	n/a	3	n/a	20.54	n/a
17	Concrete	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	49 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/21/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	5	n/a	43.24	n/a
19	Drywall	1.0	n/a	3	n/a	21.62	n/a
20	Drywall	1.0	n/a	6	n/a	54.05	n/a
21	Drywall	1.0	n/a	3	n/a	21.62	n/a
22	Drywall	1.0	n/a	2	n/a	10.81	n/a
23	Drywall	1.0	n/a	4	n/a	32.43	n/a
24	Drywall	1.0	n/a	1	n/a	0.00	n/a
25	Drywall	1.0	n/a	2	n/a	10.81	n/a
26	Drywall	1.0	n/a	3	n/a	21.62	n/a
27	Glass	1.4	n/a	5	n/a	38.92	n/a
28	Drywall	1.0	n/a	2	n/a	10.81	n/a
29	Glass	1.4	n/a	4	n/a	28.11	n/a
30	Glass	1.4	n/a	7	n/a	60.54	n/a
31	Glass	1.4	n/a	1	n/a	-4.32	n/a
32	Glass	1.4	n/a	3	n/a	17.30	n/a
33	Glass	1.4	n/a	2	n/a	6.49	n/a
34	Glass	1.4	n/a	5	n/a	38.92	n/a
				Action Level		100	n/a

Building	5
Survey Unit	50 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.0	n/a	7	n/a	64.86	n/a
2	Drywall	1.0	n/a	2	n/a	10.81	n/a
3	Steel	1.0	n/a	1	n/a	0.00	n/a
4	Steel	1.0	n/a	4	n/a	32.43	n/a
5	Steel	1.0	n/a	2	n/a	10.81	n/a
6	Steel	1.0	n/a	3	n/a	21.62	n/a
7	Drywall	1.0	n/a	1	n/a	0.00	n/a
8	Concrete	1.1	n/a	6	n/a	52.97	n/a
9	Concrete	1.1	n/a	5	n/a	42.16	n/a
10	Concrete	1.1	n/a	6	n/a	52.97	n/a
11	Concrete	1.1	n/a	11	n/a	107.03	n/a
12	Concrete	1.1	n/a	15	n/a	150.27	n/a
13	Concrete	1.1	n/a	8	n/a	74.59	n/a
14	Concrete	1.1	n/a	6	n/a	52.97	n/a
15	Concrete	1.1	n/a	2	n/a	9.73	n/a
16	Concrete	1.1	n/a	3	n/a	20.54	n/a
17	Concrete	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	50 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/23/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Glass	1.4	n/a	4	n/a	28.11	n/a
19	Drywall	1.0	n/a	4	n/a	32.43	n/a
20	Drywall	1.0	n/a	2	n/a	10.81	n/a
21	Drywall	1.0	n/a	5	n/a	43.24	n/a
22	Drywall	1.0	n/a	2	n/a	10.81	n/a
23	Drywall	1.0	n/a	3	n/a	21.62	n/a
24	Drywall	1.0	n/a	2	n/a	10.81	n/a
25	Wood	1.1	n/a	1	n/a	-1.08	n/a
26	Glass	1.4	n/a	3	n/a	17.30	n/a
27	Wood	1.1	n/a	1	n/a	-1.08	n/a
28	Wood	1.1	n/a	1	n/a	-1.08	n/a
29	Wood	1.1	n/a	3	n/a	20.54	n/a
30	Wood	1.1	n/a	2	n/a	9.73	n/a
31	Wood	1.1	n/a	2	n/a	9.73	n/a
32	Wood	1.1	n/a	4	n/a	31.35	n/a
33	Wood	1.1	n/a	1	n/a	-1.08	n/a
34	Wood	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	51 - walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	12/23/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Glass	2.5	n/a	4	n/a	15.38	n/a
2	Drywall	3.0	n/a	1	n/a	-20.51	n/a
3	Drywall	3.0	n/a	3	n/a	0.00	n/a
4	Glass	2.5	n/a	4	n/a	15.38	n/a
5	Drywall	3.0	n/a	2	n/a	-10.26	n/a
6	Drywall	3.0	n/a	3	n/a	0.00	n/a
7	Drywall	3.0	n/a	2	n/a	-10.26	n/a
8	Drywall	3.0	n/a	5	n/a	20.51	n/a
9	Drywall	3.0	n/a	4	n/a	10.26	n/a
10	Drywall	3.0	n/a	2	n/a	-10.26	n/a
11	Drywall	3.0	n/a	3	n/a	0.00	n/a
12	Concrete						
13	Concrete						
14	Concrete	See Floors Survey					
15	Concrete						
16	Concrete						
17	Concrete						
				Action Level		100	n/a

Building	5
Survey Unit	51 - floors
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/22/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Glass						
2	Drywall						
3	Drywall						
4	Glass						
5	Drywall						
6	Drywall	See Walls Survey					
7	Drywall						
8	Drywall						
9	Drywall						
10	Drywall						
11	Drywall						
12	Concrete	1.1	n/a	16	n/a	161.08	n/a
13	Concrete	1.1	n/a	2	n/a	9.73	n/a
14	Concrete	1.1	n/a	1	n/a	-1.08	n/a
15	Concrete	1.1	n/a	5	n/a	42.16	n/a
16	Concrete	1.1	n/a	2	n/a	9.73	n/a
17	Concrete	1.1	n/a	4	n/a	31.35	n/a
				Action Level		100	n/a

Building	5
Survey Unit	51 - ceiling
Class	2
Model 2221	190181
Detector 43-68	149768
Date	3/1/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Glass						
19	Drywall						
20	Drywall						
21	Glass						
22	Drywall						
23	Drywall	See Walls Survey					
24	Drywall						
25	Drywall						
26	Drywall						
27	Drywall						
28	Drywall						
29	Concrete						
30	Concrete						
31	Concrete						
32	Concrete						
33	Steel	1.0	n/a	7	n/a	64.86	n/a
34	Steel	1.0	n/a	3	n/a	21.62	n/a
35	Wood	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	51 - walls >6'
Class	2
Model 2221	183984
Detector 43-68	148835
Date	3/1/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	3.0	n/a	4	n/a	10.26	n/a
19	Steel	3.2	n/a	2	n/a	-12.31	n/a
20	Drywall	3.0	n/a	3	n/a	0.00	n/a
21	Drywall	3.0	n/a	2	n/a	-10.26	n/a
22	Drywall	3.0	n/a	1	n/a	-20.51	n/a
23	Drywall	3.0	n/a	3	n/a	0.00	n/a
24	Drywall	3.0	n/a	2	n/a	-10.26	n/a
25	Wood	3.0	n/a	1	n/a	-20.51	n/a
26	Drywall	3.0	n/a	3	n/a	0.00	n/a
27	Drywall	3.0	n/a	4	n/a	10.26	n/a
28	Drywall	3.0	n/a	3	n/a	0.00	n/a
29	Steel	3.2	n/a	2	n/a	-12.31	n/a
30	Drywall	3.0	n/a	3	n/a	0.00	n/a
31	Drywall	3.0	n/a	2	n/a	-10.26	n/a
32	Drywall	3.0	n/a	3	n/a	0.00	n/a
33	Steel						
34	Steel			See Ceiling Survey			
35	Wood						
				Action Level		100	n/a

Building	5
Survey Unit	52 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/18/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	1.0	n/a	0	n/a	-10.81	n/a
2	Drywall	1.0	n/a	1	n/a	0.00	n/a
3	Drywall	1.0	n/a	2	n/a	10.81	n/a
4	Drywall	1.0	n/a	3	n/a	21.62	n/a
5	Drywall	1.0	n/a	2	n/a	10.81	n/a
6	Concrete	1.1	n/a	3	n/a	20.54	n/a
7	Concrete	1.1	n/a	4	n/a	31.35	n/a
8	Concrete	1.1	n/a	6	n/a	52.97	n/a
9	Drywall	1.0	n/a	3	n/a	21.62	n/a
10	Concrete	1.1	n/a	5	n/a	42.16	n/a
11	Concrete	1.1	n/a	4	n/a	31.35	n/a
12	Concrete	1.1	n/a	5	n/a	42.16	n/a
13	Concrete	1.1	n/a	13	n/a	128.65	n/a
14	Concrete	1.1	n/a	9	n/a	85.41	n/a
15	Concrete	1.1	n/a	1	n/a	-1.08	n/a
16	Concrete	1.1	n/a	4	n/a	31.35	n/a
17	Concrete	1.1	n/a	6	n/a	52.97	n/a
				Action Level		100	n/a

Building	5
Survey Unit	52 - overheads
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/18/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	4	n/a	32.43	n/a
19	Drywall	1.0	n/a	2	n/a	10.81	n/a
20	Drywall	1.0	n/a	6	n/a	54.05	n/a
21	Drywall	1.0	n/a	1	n/a	0.00	n/a
22	Drywall	1.0	n/a	3	n/a	21.62	n/a
23	Concrete	1.1	n/a	8	n/a	74.59	n/a
24	Concrete	1.1	n/a	7	n/a	63.78	n/a
25	Concrete	1.1	n/a	2	n/a	9.73	n/a
26	Drywall	1.0	n/a	4	n/a	32.43	n/a
27	Drywall	1.0	n/a	1	n/a	0.00	n/a
28	Wood	1.1	n/a	3	n/a	20.54	n/a
29	Wood	1.1	n/a	2	n/a	9.73	n/a
30	Wood	1.1	n/a	5	n/a	42.16	n/a
31	Wood	1.1	n/a	3	n/a	20.54	n/a
32	Wood	1.1	n/a	2	n/a	9.73	n/a
33	Wood	1.1	n/a	2	n/a	9.73	n/a
34	Wood	1.1	n/a	1	n/a	-1.08	n/a
				Action Level		100	n/a

Building	5
Survey Unit	53 - floors walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/8/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Glass	1.5	n/a	2	n/a	5.37	n/a
2	Glass	1.5	n/a	6	n/a	48.36	n/a
3	Wood	1.7	n/a	3	n/a	13.97	n/a
4	Wood	1.7	n/a	2	n/a	3.22	n/a
5	Glass	1.5	n/a	4	n/a	26.87	n/a
6	Glass	1.5	n/a	4	n/a	26.87	n/a
7	Glass	1.5	n/a	2	n/a	5.37	n/a
8	Glass	1.5	n/a	4	n/a	26.87	n/a
9	Glass	1.5	n/a	3	n/a	16.12	n/a
10	Glass	1.5	n/a	8	n/a	69.85	n/a
11	Glass	1.5	n/a	7	n/a	59.11	n/a
12	Glass	1.5	n/a	5	n/a	37.61	n/a
13	Glass	1.5	n/a	8	n/a	69.85	n/a
14	Glass	1.5	n/a	10	n/a	91.34	n/a
15	Glass	1.5	n/a	3	n/a	16.12	n/a
16	Glass	1.5	n/a	7	n/a	59.11	n/a
17	Glass	1.5	n/a	21	n/a	209.56	n/a
				Action Level		100	n/a

Building	5
Survey Unit	53 - walls >6'
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/9/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	1.3	n/a	1	n/a	-3.22	n/a
19	Concrete	1.3	n/a	4	n/a	29.02	n/a
20	Concrete	1.3	n/a	3	n/a	18.27	n/a
21	Concrete	1.3	n/a	2	n/a	7.52	n/a
22	Concrete	1.3	n/a	4	n/a	29.02	n/a
23	Concrete	1.3	n/a	3	n/a	18.27	n/a
24	Concrete	1.3	n/a	2	n/a	7.52	n/a
25	Concrete	1.3	n/a	2	n/a	7.52	n/a
26	Concrete	1.3	n/a	3	n/a	18.27	n/a
27	Concrete	1.3	n/a	1	n/a	-3.22	n/a
28	Concrete						
29	Concrete						
30	Concrete						
31	Concrete	See Ceiling Survey					
32	Concrete						
33	Concrete						
34	Concrete						
				Action Level		100	n/a

Building	5
Survey Unit	53 - ceilings
Class	2
Model 2221	183984
Detector 43-68	148835
Date	12/20/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete						
19	Concrete						
20	Concrete						
21	Concrete						
22	Concrete						
23	Concrete	See Walls Survey					
24	Concrete						
25	Concrete						
26	Concrete						
27	Concrete						
28	Concrete	2.4	n/a	3	n/a	6.15	n/a
29	Concrete	2.4	n/a	3	n/a	6.15	n/a
30	Concrete	2.4	n/a	2	n/a	-4.10	n/a
31	Concrete	2.4	n/a	1	n/a	-14.36	n/a
32	Concrete	2.4	n/a	2	n/a	-4.10	n/a
33	Concrete	2.4	n/a	4	n/a	16.41	n/a
34	Concrete	2.4	n/a	3	n/a	6.15	n/a
				Action Level		100	n/a

Building	5
Survey Unit	54 - floors walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	12/17/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Drywall	3.0	n/a	4	n/a	10.26	n/a
2	Wood	3.0	n/a	3	n/a	0.00	n/a
3	Drywall	3.0	n/a	2	n/a	-10.26	n/a
4	Drywall	3.0	n/a	3	n/a	0.00	n/a
5	Concrete	2.4	n/a	2	n/a	-4.10	n/a
6	Steel	3.2	n/a	5	n/a	18.46	n/a
7	Concrete	2.4	n/a	2	n/a	-4.10	n/a
8	Concrete	2.4	n/a	3	n/a	6.15	n/a
9	Concrete	2.4	n/a	4	n/a	16.41	n/a
10	Concrete	2.4	n/a	3	n/a	6.15	n/a
11	Concrete	2.4	n/a	4	n/a	16.41	n/a
12	Concrete	2.4	n/a	4	n/a	16.41	n/a
13	Concrete	2.4	n/a	5	n/a	26.67	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	6	n/a	36.92	n/a
16	Concrete	2.4	n/a	3	n/a	6.15	n/a
17	Concrete	2.4	n/a	2	n/a	-4.10	n/a
				Action Level		100	n/a

Building	5
Survey Unit	54 - ceilings
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/18/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall						
19	Drywall						
20	Concrete						
21	Concrete						
22	Steel						
23	Drywall	See Walls Survey					
24	Drywall						
25	Wood	1.1	n/a	3	n/a	20.54	n/a
26	Wood	1.1	n/a	2	n/a	9.73	n/a
27	Wood	1.1	n/a	2	n/a	9.73	n/a
28	Wood	1.1	n/a	1	n/a	-1.08	n/a
29	Wood	1.1	n/a	1	n/a	-1.08	n/a
30	Wood	1.1	n/a	0	n/a	-11.89	n/a
31	Wood	1.1	n/a	4	n/a	31.35	n/a
32	Wood	1.1	n/a	2	n/a	9.73	n/a
33	Wood	1.1	n/a	1	n/a	-1.08	n/a
34	Wood	1.1	n/a	2	n/a	9.73	n/a
				Action Level		100	n/a

Building	5
Survey Unit	54 - walls >6'
Class	2
Model 2221	183984
Detector 43-68	148835
Date	12/22/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	3.0	n/a	2	n/a	-10.26	n/a
19	Drywall	3.0	n/a	3	n/a	0.00	n/a
20	Concrete	2.4	n/a	3	n/a	6.15	n/a
21	Concrete	2.4	n/a	5	n/a	26.67	n/a
22	Steel	3.2	n/a	4	n/a	8.21	n/a
23	Drywall	3.0	n/a	7	n/a	41.03	n/a
24	Drywall	3.0	n/a	3	n/a	0.00	n/a
25	Wood						
26	Wood						
27	Wood						
28	Wood						
29	Wood						
30	Wood						
31	Wood			See Ceiling Survey			
32	Wood						
33	Wood						
34	Wood						
				Action Level		100	n/a

Building	5
Survey Unit	55 - floors walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/8/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Steel	1.6	n/a	1	n/a	-6.45	n/a
2	Steel	1.6	n/a	2	n/a	4.30	n/a
3	Steel	1.6	n/a	3	n/a	15.05	n/a
4	Steel	1.6	n/a	4	n/a	25.79	n/a
5	Steel	1.6	n/a	2	n/a	4.30	n/a
6	Concrete	1.3	n/a	2	n/a	7.52	n/a
7	Concrete	1.3	n/a	5	n/a	39.76	n/a
8	Steel	1.6	n/a	3	n/a	15.05	n/a
9	Steel	1.6	n/a	4	n/a	25.79	n/a
10	Steel	1.6	n/a	3	n/a	15.05	n/a
11	Steel	1.6	n/a	4	n/a	25.79	n/a
12	Wood	1.7	n/a	3	n/a	13.97	n/a
13	Wood	1.7	n/a	9	n/a	78.45	n/a
14	Wood	1.7	n/a	5	n/a	35.46	n/a
15	Wood	1.7	n/a	4	n/a	24.72	n/a
16	Wood	1.7	n/a	7	n/a	56.96	n/a
17	Wood	1.7	n/a	3	n/a	13.97	n/a
				Action Level		100	n/a

Building	5
Survey Unit	55 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/20/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Steel	1.6	n/a	6	n/a	47.28	n/a
19	Steel	1.6	n/a	3	n/a	15.05	n/a
20	Steel	1.6	n/a	2	n/a	4.30	n/a
21	Steel	1.6	n/a	4	n/a	25.79	n/a
22	Steel	1.6	n/a	1	n/a	-6.45	n/a
23	Steel	1.6	n/a	5	n/a	36.54	n/a
24	Steel	1.6	n/a	4	n/a	25.79	n/a
25	Steel	1.6	n/a	2	n/a	4.30	n/a
26	Steel	1.6	n/a	2	n/a	4.30	n/a
27	Steel	1.6	n/a	3	n/a	15.05	n/a
28	Steel	1.6	n/a	1	n/a	-6.45	n/a
29	Steel	1.6	n/a	4	n/a	25.79	n/a
30	Steel	1.6	n/a	5	n/a	36.54	n/a
31	Steel	1.6	n/a	3	n/a	15.05	n/a
32	Steel	1.6	n/a	2	n/a	4.30	n/a
33	Steel	1.6	n/a	2	n/a	4.30	n/a
34	Steel	1.6	n/a	3	n/a	15.05	n/a
35	Steel	1.6	n/a	1	n/a	-6.45	n/a
				Action Level		100	n/a

Building	5
Survey Unit	56 - floors walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/20/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	3	n/a	18.27	n/a
2	Concrete	1.3	n/a	4	n/a	29.02	n/a
3	Steel	1.6	n/a	2	n/a	4.30	n/a
4	Concrete	1.3	n/a	1	n/a	-3.22	n/a
5	Concrete	1.3	n/a	3	n/a	18.27	n/a
6	Concrete	1.3	n/a	2	n/a	7.52	n/a
7	Concrete	1.3	n/a	4	n/a	29.02	n/a
8	Concrete	1.3	n/a	2	n/a	7.52	n/a
9	Concrete	1.3	n/a	2	n/a	7.52	n/a
10	Concrete	1.3	n/a	6	n/a	50.51	n/a
11	Concrete	1.3	n/a	4	n/a	29.02	n/a
12	Concrete	1.3	n/a	3	n/a	18.27	n/a
13	Concrete	1.3	n/a	2	n/a	7.52	n/a
14	Concrete	1.3	n/a	5	n/a	39.76	n/a
15	Concrete	1.3	n/a	2	n/a	7.52	n/a
16	Concrete	1.3	n/a	3	n/a	18.27	n/a
17	Concrete	1.3	n/a	8	n/a	72.00	n/a
18	Concrete	1.3	n/a	11	n/a	104.24	n/a
				Action Level		100	n/a

Building	5
Survey Unit	56 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/20/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Drywall	1.4	n/a	5	n/a	38.69	n/a
20	Drywall	1.4	n/a	4	n/a	27.94	n/a
21	Drywall	1.4	n/a	6	n/a	49.43	n/a
22	Drywall	1.4	n/a	3	n/a	17.19	n/a
23	Drywall	1.4	n/a	5	n/a	38.69	n/a
24	Drywall	1.4	n/a	3	n/a	17.19	n/a
25	Drywall	1.4	n/a	2	n/a	6.45	n/a
26	Drywall	1.4	n/a	4	n/a	27.94	n/a
27	Drywall	1.4	n/a	6	n/a	49.43	n/a
28	Drywall	1.4	n/a	4	n/a	27.94	n/a
29	Drywall	1.4	n/a	5	n/a	38.69	n/a
30	Drywall	1.4	n/a	1	n/a	-4.30	n/a
31	Drywall	1.4	n/a	4	n/a	27.94	n/a
32	Steel	1.6	n/a	5	n/a	36.54	n/a
33	Steel	1.6	n/a	6	n/a	47.28	n/a
34	Steel	1.6	n/a	2	n/a	4.30	n/a
35	Steel	1.6	n/a	3	n/a	15.05	n/a
36	Steel	1.6	n/a	4	n/a	25.79	n/a
				Action Level		100	n/a

Building	5
Survey Unit	57 - floors
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/7/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	6	n/a	50.51	n/a
2	Concrete	1.3	n/a	7	n/a	61.25	n/a
3	Concrete	1.3	n/a	8	n/a	72.00	n/a
4	Concrete	1.3	n/a	5	n/a	39.76	n/a
5	Concrete	1.3	n/a	2	n/a	7.52	n/a
6	Concrete	1.3	n/a	5	n/a	39.76	n/a
7	Concrete	1.3	n/a	4	n/a	29.02	n/a
8	Concrete	1.3	n/a	3	n/a	18.27	n/a
9	Concrete	1.3	n/a	7	n/a	61.25	n/a
10	Concrete	1.3	n/a	8	n/a	72.00	n/a
11	Concrete	1.3	n/a	8	n/a	72.00	n/a
12	Concrete	1.3	n/a	3	n/a	18.27	n/a
13	Concrete	1.3	n/a	5	n/a	39.76	n/a
14	Concrete	1.3	n/a	4	n/a	29.02	n/a
15	Concrete	1.3	n/a	3	n/a	18.27	n/a
16	Concrete	1.3	n/a	4	n/a	29.02	n/a
17	Concrete	1.3	n/a	3	n/a	18.27	n/a
				Action Level		100	n/a

Building	5
Survey Unit	57 - walls
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/7/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall						
19	Drywall						
20	Drywall						
21	Drywall	See 2/22/11 Survey					
22	Drywall						
23	Drywall						
24	Drywall	1.4	n/a	4	n/a	27.94	n/a
25	Drywall	1.4	n/a	4	n/a	27.94	n/a
26	Drywall	1.4	n/a	2	n/a	6.45	n/a
27	Drywall	1.4	n/a	2	n/a	6.45	n/a
28	Drywall	1.4	n/a	3	n/a	17.19	n/a
29	Drywall	1.4	n/a	4	n/a	27.94	n/a
30	Drywall	1.4	n/a	5	n/a	38.69	n/a
31	Drywall	1.4	n/a	3	n/a	17.19	n/a
32	Drywall	1.4	n/a	2	n/a	6.45	n/a
33	Drywall	1.4	n/a	4	n/a	27.94	n/a
34	Drywall	1.4	n/a	3	n/a	17.19	n/a
				Action Level		100	n/a

Building	5
Survey Unit	57 - walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/22/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Drywall	1.0	n/a	2	n/a	10.81	n/a
19	Drywall	1.0	n/a	4	n/a	32.43	n/a
20	Drywall	1.0	n/a	3	n/a	21.62	n/a
21	Drywall	1.0	n/a	3	n/a	21.62	n/a
22	Drywall	1.0	n/a	3	n/a	21.62	n/a
23	Drywall	1.0	n/a	3	n/a	21.62	n/a
24	Drywall						
25	Drywall						
26	Drywall						
27	Drywall						
28	Drywall	See 12/7/2010 Survey					
29	Drywall						
30	Drywall						
31	Drywall						
32	Drywall						
33	Drywall						
34	Drywall						
				Action Level		100	n/a

Building	5
Survey Unit	57 - walls >6'
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/9/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Drywall	1.4	n/a	4	n/a	27.94	n/a
36	Drywall	1.4	n/a	5	n/a	38.69	n/a
37	Drywall	1.4	n/a	3	n/a	17.19	n/a
38	Drywall	1.4	n/a	3	n/a	17.19	n/a
39	Drywall	1.4	n/a	2	n/a	6.45	n/a
40	Glass	1.5	n/a	3	n/a	16.12	n/a
41	Glass	1.5	n/a	6	n/a	48.36	n/a
42	Drywall	1.4	n/a	2	n/a	6.45	n/a
43	Glass	1.5	n/a	2	n/a	5.37	n/a
44	Drywall	1.4	n/a	3	n/a	17.19	n/a
45	Glass						
46	Glass						
47	Glass						
48	Glass						
49	Glass			See ceiling survey			
50	Glass						
51	Glass						
				Action Level		100	n/a

Building	5
Survey Unit	57 - ceilings
Class	2
Model 2221	190181
Detector 43-68	149768
Date	2/22/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
35	Drywall						
36	Drywall						
37	Drywall						
38	Drywall						
39	Drywall	See walls survey					
40	Glass						
41	Glass						
42	Drywall						
43	Glass						
44	Drywall						
45	Glass	1.4	n/a	3	n/a	17.30	n/a
46	Glass	1.4	n/a	2	n/a	6.49	n/a
47	Glass	1.4	n/a	0	n/a	-15.14	n/a
48	Glass	1.4	n/a	1	n/a	-4.32	n/a
49	Glass	1.4	n/a	2	n/a	6.49	n/a
50	Glass	1.4	n/a	4	n/a	28.11	n/a
51	Glass	1.4	n/a	2	n/a	6.49	n/a
				Action Level		100	n/a

Building	5
Survey Unit	58 - floors walls
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/21/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Steel	1.0	n/a	1	n/a	0.00	n/a
2	Steel	1.0	n/a	2	n/a	10.81	n/a
3	Steel	1.0	n/a	4	n/a	32.43	n/a
4	Steel	1.0	n/a	2	n/a	10.81	n/a
5	Glass	1.4	n/a	3	n/a	17.30	n/a
6	Wood	1.1	n/a	2	n/a	9.73	n/a
7	Glass	1.4	n/a	3	n/a	17.30	n/a
8	Glass	1.4	n/a	2	n/a	6.49	n/a
9	Glass	1.4	n/a	10	n/a	92.97	n/a
10	Wood	1.1	n/a	2	n/a	9.73	n/a
11	Concrete	1.1	n/a	3	n/a	20.54	n/a
12	Concrete	1.1	n/a	2	n/a	9.73	n/a
13	Concrete	1.1	n/a	1	n/a	-1.08	n/a
14	Concrete	1.1	n/a	2	n/a	9.73	n/a
15	Concrete	1.1	n/a	4	n/a	31.35	n/a
16	Concrete	1.1	n/a	5	n/a	42.16	n/a
17	Concrete	1.1	n/a	3	n/a	20.54	n/a
				Action Level		100	n/a

Building	5
Survey Unit	58 Overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	3/3/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Glass	1.4	n/a	4	n/a	27.94	n/a
19	Glass	1.4	n/a	5	n/a	38.69	n/a
20	Glass	1.4	n/a	3	n/a	17.19	n/a
21	Glass	1.4	n/a	4	n/a	27.94	n/a
22	Glass	1.4	n/a	4	n/a	27.94	n/a
23	Glass	1.4	n/a	6	n/a	49.43	n/a
24	Glass	1.4	n/a	5	n/a	38.69	n/a
25	Glass	1.4	n/a	3	n/a	17.19	n/a
26	Wood	1.1	n/a	2	n/a	9.67	n/a
27	Steel	1.0	n/a	4	n/a	32.24	n/a
28	Steel	1.0	n/a	5	n/a	42.99	n/a
29	Steel	1.0	n/a	2	n/a	10.75	n/a
30	Steel	1.0	n/a	6	n/a	53.73	n/a
31	Steel	1.0	n/a	4	n/a	32.24	n/a
32	Fiberglass	1.4	n/a	4	n/a	27.94	n/a
33	Fiberglass	1.4	n/a	5	n/a	38.69	n/a
34	Fiberglass	1.4	n/a	3	n/a	17.19	n/a
				Action Level		100	n/a

Building	5
Survey Unit	59 - floors & walls
Class	2
Model 2221	148451
Detector 43-68	177646
Date	3/3/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Wood	2.2	n/a	6	n/a	40.84	n/a
2	Drywall	3.0	n/a	7	n/a	42.99	n/a
3	Drywall	3.0	n/a	6	n/a	32.24	n/a
4	Drywall	3.0	n/a	8	n/a	53.73	n/a
5	Brick	1.8	n/a	5	n/a	34.39	n/a
6	Brick	1.8	n/a	6	n/a	45.14	n/a
7	Brick	1.8	n/a	4	n/a	23.64	n/a
8	Brick	1.8	n/a	5	n/a	34.39	n/a
9	Drywall	3.0	n/a	6	n/a	32.24	n/a
10	Drywall	3.0	n/a	7	n/a	42.99	n/a
11	Drywall	3.0	n/a	5	n/a	21.49	n/a
12	Concrete	1.8	n/a	3	n/a	12.90	n/a
13	Concrete	1.8	n/a	5	n/a	34.39	n/a
14	Concrete	1.8	n/a	4	n/a	23.64	n/a
15	Concrete	1.8	n/a	3	n/a	12.90	n/a
16	Concrete	1.8	n/a	4	n/a	23.64	n/a
17	Concrete	1.8	n/a	3	n/a	12.90	n/a
Action Level						100	n/a

Building	5
Survey Unit	60 -walls
Class	1
Model 2221	183984
Detector 43-68	148835
Date	12/21/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Wood	3.0	n/a	3	n/a	0.00	n/a
2	Concrete	2.4	n/a	2	n/a	-4.10	n/a
3	Wood	3.0	n/a	2	n/a	-10.26	n/a
4	Concrete	2.4	n/a	3	n/a	6.15	n/a
5	Wood	3.0	n/a	4	n/a	10.26	n/a
6	Concrete	2.4	n/a	5	n/a	26.67	n/a
7	Wood	3.0	n/a	4	n/a	10.26	n/a
8	Wood	3.0	n/a	1	n/a	-20.51	n/a
9	Wood	3.0	n/a	2	n/a	-10.26	n/a
10	Wood	3.0	n/a	2	n/a	-10.26	n/a
11	Wood	3.0	n/a	1	n/a	-20.51	n/a
12	Wood	3.0	n/a	0	n/a	-30.77	n/a
13	Wood	3.0	n/a	3	n/a	0.00	n/a
14	Wood	3.0	n/a	2	n/a	-10.26	n/a
15	Wood	3.0	n/a	3	n/a	0.00	n/a
16	Wood	3.0	n/a	1	n/a	-20.51	n/a
17	Glass	2.5	n/a	2	n/a	-5.13	n/a
18	Wood	3.0	n/a	0	n/a	-30.77	n/a
19	Glass	2.5	n/a	1	n/a	-15.38	n/a
20	Wood	3.0	n/a	2	n/a	-10.26	n/a
21	Wood	3.0	n/a	2	n/a	-10.26	n/a
22	Wood	3.0	n/a	2	n/a	-10.26	n/a
23	Wood	3.0	n/a	3	n/a	0.00	n/a
24	Wood	3.0	n/a	2	n/a	-10.26	n/a
25	Wood	3.0	n/a	1	n/a	-20.51	n/a
				Action Level		100	n/a

Building	5
Survey Unit	60 - floors
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/21/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
26	Concrete	1.1	n/a	3	n/a	20.54	n/a
27	Concrete	1.1	n/a	4	n/a	31.35	n/a
28	Concrete	1.1	n/a	2	n/a	9.73	n/a
29	Concrete	1.1	n/a	3	n/a	20.54	n/a
30	Concrete	1.1	n/a	1	n/a	-1.08	n/a
31	Concrete	1.1	n/a	1	n/a	-1.08	n/a
32	Concrete	1.1	n/a	4	n/a	31.35	n/a
33	Concrete	1.1	n/a	6	n/a	52.97	n/a
34	Concrete	1.1	n/a	0	n/a	-11.89	n/a
35	Concrete	1.1	n/a	2	n/a	9.73	n/a
36	Concrete	1.1	n/a	0	n/a	-11.89	n/a
37	Concrete	1.1	n/a	2	n/a	9.73	n/a
38	Concrete	1.1	n/a	1	n/a	-1.08	n/a
39	Concrete	1.1	n/a	1	n/a	-1.08	n/a
40	Concrete	1.1	n/a	5	n/a	42.16	n/a
41	Concrete	1.1	n/a	5	n/a	42.16	n/a
42	Concrete	1.1	n/a	1	n/a	-1.08	n/a
				Action Level		100	n/a

Building	5
Survey Unit	60 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	12/21/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
40	Wood	3.0	n/a	3	n/a	0.00	n/a
41	Wood	3.0	n/a	1	n/a	-20.51	n/a
42	Wood	3.0	n/a	2	n/a	-10.26	n/a
43	Wood	3.0	n/a	3	n/a	0.00	n/a
44	Wood	3.0	n/a	4	n/a	10.26	n/a
45	Wood	3.0	n/a	1	n/a	-20.51	n/a
46	Wood	3.0	n/a	2	n/a	-10.26	n/a
47	Wood	3.0	n/a	4	n/a	10.26	n/a
48	Wood	3.0	n/a	5	n/a	20.51	n/a
49	Wood	3.0	n/a	3	n/a	0.00	n/a
50	Glass	2.5	n/a	3	n/a	5.13	n/a
51	Wood	3.0	n/a	1	n/a	-20.51	n/a
52	Wood	3.0	n/a	2	n/a	-10.26	n/a
53	Wood	3.0	n/a	0	n/a	-30.77	n/a
54	Wood	3.0	n/a	3	n/a	0.00	n/a
55	Wood	3.0	n/a	4	n/a	10.26	n/a
56	Wood	3.0	n/a	2	n/a	-10.26	n/a
Action Level						100	n/a

Note: For overheads, measurement numbers were assigned starting with 40 rather than 43. They are different data points than those identified in SU 60 floors. The data has been verified.

SU 61 has only tritium smears as reported in Appendix I

Building	5
Survey Unit	62 - overheads
Class	1
Model 2221	183984
Detector 43-68	148835
Date	12/15/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	2.4	n/a	4	n/a	16.41	n/a
2	Concrete	2.4	n/a	3	n/a	6.15	n/a
3	Concrete	2.4	n/a	5	n/a	26.67	n/a
4	Steel	3.2	n/a	4	n/a	8.21	n/a
5	Steel	3.2	n/a	4	n/a	8.21	n/a
6	Drywall	3.0	n/a	6	n/a	30.77	n/a
7	Drywall	3.0	n/a	4	n/a	10.26	n/a
8	Drywall	3.0	n/a	4	n/a	10.26	n/a
9	Drywall	3.0	n/a	4	n/a	10.26	n/a
10	Drywall	3.0	n/a	4	n/a	10.26	n/a
11	Drywall	3.0	n/a	4	n/a	10.26	n/a
12	Concrete	2.4	n/a	7	n/a	47.18	n/a
13	Concrete	2.4	n/a	4	n/a	16.41	n/a
14	Concrete	2.4	n/a	3	n/a	6.15	n/a
15	Concrete	2.4	n/a	2	n/a	-4.10	n/a
16	Concrete	2.4	n/a	5	n/a	26.67	n/a
17	Concrete	2.4	n/a	4	n/a	16.41	n/a
Action Level						100	n/a

Building	5
Survey Unit	62 - overheads
Class	2
Model 2221	183984
Detector 43-68	148835
Date	12/15/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
18	Concrete	2.4	n/a	4	n/a	16.41	n/a
19	Concrete	2.4	n/a	4	n/a	16.41	n/a
20	Concrete	2.4	n/a	4	n/a	16.41	n/a
21	Concrete	2.4	n/a	5	n/a	26.67	n/a
22	Concrete	2.4	n/a	2	n/a	-4.10	n/a
23	Concrete	2.4	n/a	4	n/a	16.41	n/a
24	Concrete	2.4	n/a	3	n/a	6.15	n/a
25	Concrete	2.4	n/a	3	n/a	6.15	n/a
26	Concrete	2.4	n/a	6	n/a	36.92	n/a
27	Concrete	2.4	n/a	4	n/a	16.41	n/a
28	Drywall	3.0	n/a	3	n/a	0.00	n/a
29	Drywall	3.0	n/a	4	n/a	10.26	n/a
30	Drywall	3.0	n/a	4	n/a	10.26	n/a
31	Concrete	2.4	n/a	5	n/a	26.67	n/a
32	Concrete	2.4	n/a	4	n/a	16.41	n/a
33	Concrete	2.4	n/a	4	n/a	16.41	n/a
34	Concrete	2.4	n/a	5	n/a	26.67	n/a
Action Level						100	n/a

Building	5
Survey Unit	63 - overheads
Class	1
Model 2221	148451
Detector 43-68	177646
Date	12/15/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.3	n/a	2	n/a	7.52	n/a
2	Concrete	1.3	n/a	2	n/a	7.52	n/a
3	Concrete	1.3	n/a	1	n/a	-3.22	n/a
4	Concrete	1.3	n/a	3	n/a	18.27	n/a
5	Concrete	1.3	n/a	3	n/a	18.27	n/a
6	Concrete	1.3	n/a	5	n/a	39.76	n/a
7	Concrete	1.3	n/a	5	n/a	39.76	n/a
8	Concrete	1.3	n/a	5	n/a	39.76	n/a
9	Concrete	1.3	n/a	1	n/a	-3.22	n/a
10	Concrete	1.3	n/a	2	n/a	7.52	n/a
11	Concrete	1.3	n/a	2	n/a	7.52	n/a
12	Concrete	1.3	n/a	3	n/a	18.27	n/a
13	Concrete	1.3	n/a	3	n/a	18.27	n/a
14	Concrete	1.3	n/a	3	n/a	18.27	n/a
15	Concrete	1.3	n/a	1	n/a	-3.22	n/a
16	Concrete	1.3	n/a	6	n/a	50.51	n/a
17	Concrete	1.3	n/a	4	n/a	29.02	n/a
18	Concrete	1.3	n/a	6	n/a	50.51	n/a
				Action Level		100	n/a

Building	5
Survey Unit	63 - overheads
Class	2
Model 2221	148451
Detector 43-68	177646
Date	12/15/2010
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.372
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.436
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Concrete	1.3	n/a	4	n/a	29.02	n/a
20	Concrete	1.3	n/a	3	n/a	18.27	n/a
21	Concrete	1.3	n/a	3	n/a	18.27	n/a
22	Concrete	1.3	n/a	6	n/a	50.51	n/a
23	Concrete	1.3	n/a	6	n/a	50.51	n/a
24	Concrete	1.3	n/a	1	n/a	-3.22	n/a
25	Concrete	1.3	n/a	5	n/a	39.76	n/a
26	Concrete	1.3	n/a	3	n/a	18.27	n/a
27	Concrete	1.3	n/a	2	n/a	7.52	n/a
28	Concrete	1.3	n/a	2	n/a	7.52	n/a
29	Concrete	1.3	n/a	0	n/a	-13.97	n/a
30	Concrete	1.3	n/a	5	n/a	39.76	n/a
31	Concrete	1.3	n/a	3	n/a	18.27	n/a
32	Concrete	1.3	n/a	3	n/a	18.27	n/a
33	Concrete	1.3	n/a	7	n/a	61.25	n/a
34	Concrete	1.3	n/a	2	n/a	7.52	n/a
35	Concrete	1.3	n/a	2	n/a	7.52	n/a
				Action Level		100	n/a

Building	5
Survey Unit	64 - window sills
Class	1
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Steel	3.2	n/a	9	n/a	59.49	n/a
2	Steel	3.2	n/a	3	n/a	-2.05	n/a
3	Steel	3.2	n/a	4	n/a	8.21	n/a
4	Steel	3.2	n/a	3	n/a	-2.05	n/a
5	Steel	3.2	n/a	5	n/a	18.46	n/a
6	Steel	3.2	n/a	4	n/a	8.21	n/a
7	Steel	3.2	n/a	5	n/a	18.46	n/a
8	Steel	3.2	n/a	3	n/a	-2.05	n/a
9	Steel	3.2	n/a	3	n/a	-2.05	n/a
10	Steel	3.2	n/a	6	n/a	28.72	n/a
11	Steel	3.2	n/a	3	n/a	-2.05	n/a
12	Steel	3.2	n/a	3	n/a	-2.05	n/a
13	Steel	3.2	n/a	3	n/a	-2.05	n/a
14	Steel	3.2	n/a	3	n/a	-2.05	n/a
15	Steel	3.2	n/a	3	n/a	-2.05	n/a
16	Steel	3.2	n/a	4	n/a	8.21	n/a
17	Steel	3.2	n/a	4	n/a	8.21	n/a
18	Steel	3.2	n/a	4	n/a	8.21	n/a
Action Level						100	n/a

Building	5
Survey Unit	65 - ext. wall
Class	2
Model 2221	183984
Detector 43-68	148835
Date	1/5/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.390
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.340
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
19	Concrete	2.4	n/a	4	n/a	16.41	n/a
20	Concrete	2.4	n/a	4	n/a	16.41	n/a
21	Concrete	2.4	n/a	1	n/a	-14.36	n/a
22	Concrete	2.4	n/a	3	n/a	6.15	n/a
23	Concrete	2.4	n/a	4	n/a	16.41	n/a
24	Concrete	2.4	n/a	5	n/a	26.67	n/a
25	Concrete	2.4	n/a	3	n/a	6.15	n/a
26	Concrete	2.4	n/a	4	n/a	16.41	n/a
27	Concrete	2.4	n/a	5	n/a	26.67	n/a
28	Concrete	2.4	n/a	4	n/a	16.41	n/a
29	Concrete	2.4	n/a	5	n/a	26.67	n/a
30	Concrete	2.4	n/a	2	n/a	-4.10	n/a
31	Concrete	2.4	n/a	4	n/a	16.41	n/a
32	Concrete	2.4	n/a	4	n/a	16.41	n/a
33	Concrete	2.4	n/a	4	n/a	16.41	n/a
34	Concrete	2.4	n/a	5	n/a	26.67	n/a
35	Concrete	2.4	n/a	4	n/a	16.41	n/a
36	Concrete	2.4	n/a	4	n/a	16.41	n/a
				Action Level		100	n/a

Note: Although SU-64 and SU-65 are separate SU's they were surveyed as a single evolution therefore continuing the numbering sequence.

Building	5
Survey Unit	66 - floor
Class	1
Model 2221	190181
Detector 43-68	149768
Date	2/7/2011
Static Count Time (min)	1.0
Background Count Time (min)	1.0
α Efficiency- Instrument	0.370
α Efficiency- Surface	0.25
β Efficiency- Instrument	0.390
β Efficiency- Surface	0.5
Area Correction Factor	1.00

Measurement No.	Material	Ref. Background (cpm)		Static Counts (cpm)		Static (dpm/100 cm ²)	
		α	β	α	β	α	β
1	Concrete	1.1	n/a	4	n/a	31.35	n/a
2	Concrete	1.1	n/a	2	n/a	9.73	n/a
3	Concrete	1.1	n/a	1	n/a	-1.08	n/a
4	Concrete	1.1	n/a	2	n/a	9.73	n/a
5	Concrete	1.1	n/a	4	n/a	31.35	n/a
6	Concrete	1.1	n/a	5	n/a	42.16	n/a
7	Concrete	1.1	n/a	3	n/a	20.54	n/a
8	Concrete	1.1	n/a	3	n/a	20.54	n/a
9	Concrete	1.1	n/a	4	n/a	31.35	n/a
10	Concrete	1.1	n/a	2	n/a	9.73	n/a
11	Concrete	1.1	n/a	3	n/a	20.54	n/a
12	Concrete	1.1	n/a	6	n/a	52.97	n/a
13	Concrete	1.1	n/a	1	n/a	-1.08	n/a
14	Concrete	1.1	n/a	7	n/a	63.78	n/a
15	Concrete	1.1	n/a	2	n/a	9.73	n/a
16	Concrete	1.1	n/a	2	n/a	9.73	n/a
17	Concrete	1.1	n/a	5	n/a	42.16	n/a
				Action Level		100	n/a

APPENDIX F
SCAN SURVEY DATA (ON CD)

APPENDIX F

SCAN SURVEY DATA

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SU-30	F-448	SU-64	F-1013
SU-31	F-469	SU-65	F-1016
SU-32	F-472	SU-66	F-1019

Surface Contamination Monitor Auto-Generated Survey Report Description

This Appendix contains the auto-generated reports for surveys performed with the Surface Contamination Monitor (SCM). The reports are generated using copyrighted software Survey Information Management System (SIMS). The basic design of the software is to eliminate human errors in the creation of survey reports. Errors such as transcription errors are eliminated by limiting inputs to the report to direct inputs from other computer processes or files within SIMS. The following is a description of the SCM Auto-Generated Reports that follow in this Appendix.

A separate report is generated for each SCM survey. There are many survey units (SU) within a building or area survey. Each SU may have multiple SCM surveys. As an example, a SU may have a floor survey, a lower wall survey, an upper wall and ceiling survey. Surveys are limited to 100 square meters if they are Class 1 area surveys. To control the data for a large project, an alpha-numeric survey file name, limited to 8 digits, is assigned to each SCM survey. File names for surveys performed at the former Naval Air Station Alameda contain 7 digits. The file nomenclature is as follows;

Alpha Numeric Digit	Description	Example
1	Type of Survey	F – Final Status, P – Performance Based Check T - Test
2	Building or Area	A – Building 5 B – Building 44 C – Building 66 D – Building 113 E – Building 114 Courtyard F – Building 346 Slab G – Bunker 353 H – Building 400 I – Bunker 497 K – Former Smelter Area J – Pier 3
3, 4	Survey Unit Number.	01 – SU 1 02 – SU 2 03 – SU 3, etc.
5,6	Building Surface and Type of Survey	01 – Floor survey, alpha 02 – Floor survey, beta 11 – Lower walls, alpha 12 – Lower walls, beta 21 – Upper walls, alpha 22 – Upper walls, beta 31 – Ceilings, alpha 32 – Ceilings, beta
7	Incremental Survey Number.	A – First survey B – Second survey, etc.

As an example, Survey File Name FC0101A, is the final status survey performed in Building 66, in survey unit SU 1, on the floor, surveying for alpha activity. It is the first survey at that surface location. There is no FC0101B, indication that the survey is the only SCM survey on that surface.

Survey Report Table: The first 5 lines items of the table are drawn from the SCM performing the survey. The information is input into the on-board SCM computer by the SCM operator, or is known by the computer. The operator will input the survey file name, his/her name (multiple names if more than one operator involved), and select the type of survey configuration (dynamic mode, static mode, recount assembly or single detector and size of detector). A detector listing of R180 is a dynamic mode recount assembly with a 180 centimeter (cm) detector. A detector listing of C180 is a static mode with a 180 cm detector. The survey date and the SCM number are known by the on-board computer.

Each page of a survey report is date and time stamped at the time of processing and successively numbered..

The “Criteria” section, are drawn from information pre-established in the SIMS computer. Release criteria for each type of survey and radionuclide of concern (ROC) are input into the computer prior to SIMS processing. The SIMS processor simply selects the ROC. The survey report will use the appropriate criteria in evaluating the data. The release criteria will be listed on the first page.

The “System Information” section provides the computer system information. Two key parameters are input into SIMS prior to survey processing. They are background values associated with the various surface materials to be surveyed and SCM efficiency by radionuclide and system configuration. Alpha surveys are performed without background subtraction. Beta surveys will use a single value listed in counts per minute (cpm). That value will be subtracted for every 100 cm² value prior to calculating the disintegrations per minute (dpm) value. The SIMS and SCM versions are inherent in the two computers.

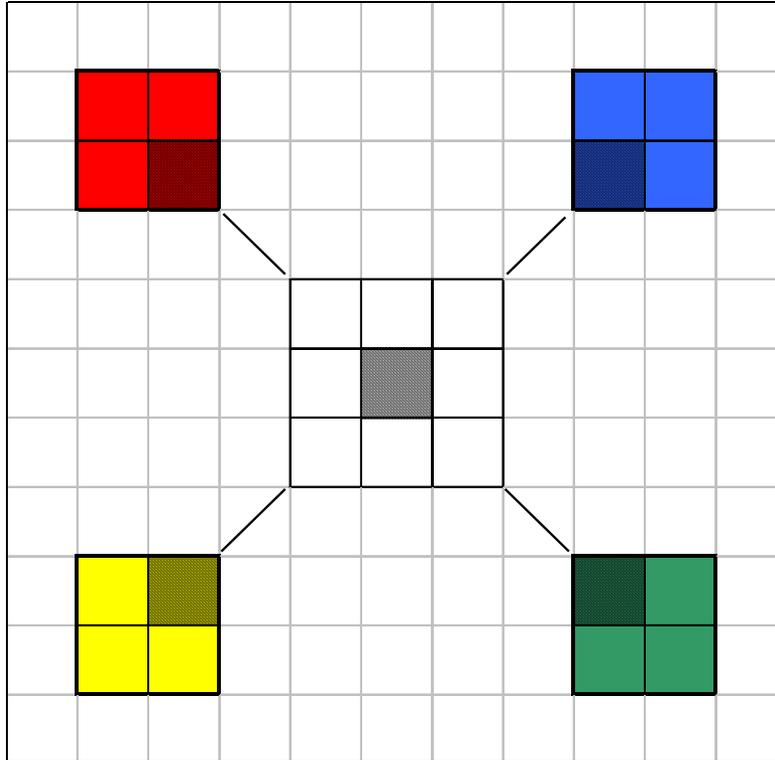
The “Survey Results” section is a result of the data processing. Within SIMS, the SIMS processor can select “Below Criteria” if no value exceeds the criteria stated above. Another option is to record the highest 100 cm² area value for the survey.

Below the survey report table, a statement is made to express whether the survey image is spatially correlated by the statement “The lower left corner of all images corresponds to the southwest corner of the survey”. Surveys that are not spatially correlated will have that statement below the table “This survey is not position correlated.”

Two-Dimensional Color Graphic Images: SCM systems collect data in 25 cm² “pixels of data. The survey data is “stitched” by the SIMS processor. During the stitching process, the operator does not see data, but rectangular blocks that can be aligned. The blocks coincide with data strips obtained by the SCM operator. For dynamic surveys, the data strip will have the dimensions of the detector width by the length of distance rolled. For static surveys the blocks will be 180 cm by 10 cm. Each strip is numbered by the SCM computer. To “stitch” the survey data, the processor aligns the strips as indicated

by maps drawn by the technicians while obtaining the data. For static surveys, the individual strips are aligned side by side. SIMS will then correlate all data in 25 cm² “pixels, then evaluate all possible combinations of 4 “pixels” or 100 cm². The following demonstrates the process.

Each 25 cm² “pixel” of data is combined with 4 combinations of adjacent “pixels”. The summed value is then placed in the lower left “pixel”, resulting in each new “pixel” representing activity in a 100 cm² area. Four hundred 100 cm² areas will result in a one square meter area.



The two-dimension display provides an image of the activity with increasing activity level being depicted by a more intense light image. Each two-dimensional display has a computer applied 1 square meter grid (blue lines) to provide the viewer with perspective on the size of the survey area and assist in locating any hot spots that may appear. The horizontal and vertical scales of the two dimensional display are in meters. The color scale can be adjusted but is typically set for a maximum “white” image of 3 times the release criteria.

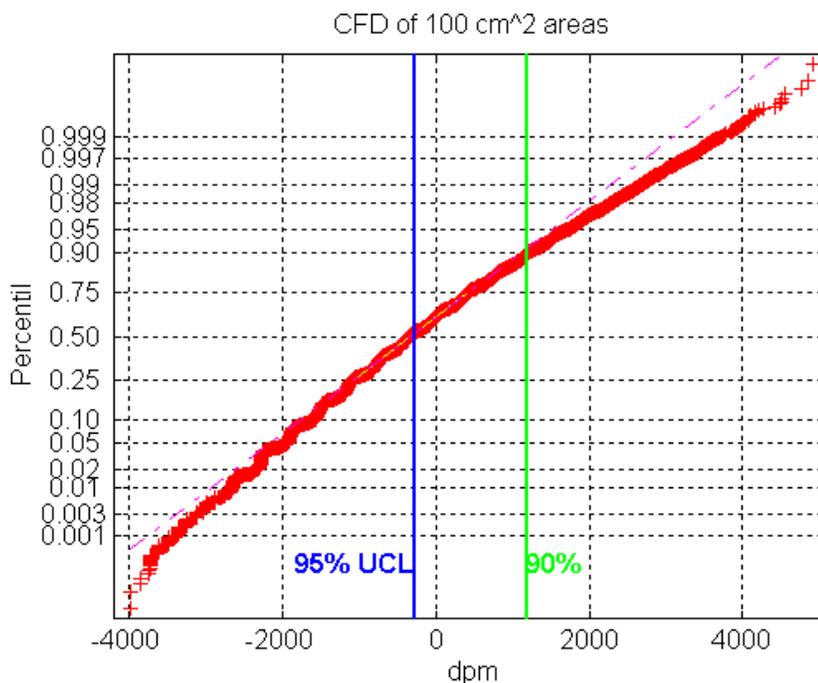
Alpha Surveys: Alpha surveys are conducted using a recount detector assembly. The survey process is described in the Work Plan and the Task Specific Plan for surveys performed at the former Naval Air Station Alameda and implements the process described in MARSSIM, Appendix J. The detectors are a fixed distance apart. SIMS software will process each of the detector data independently. The images from both the primary and recount detector are displayed in Figures 1 and 2 to demonstrate to the randomness of background and low level counting performed by the SCM. Since the critical issue in low level alpha counting is to minimize the impact of false positives due to background, a “coincidence logic” evaluation is performed by SIMS (Figure 3). The

data from the recount detector is superimposed on the primary detector. Since the detectors are hard mounted together in a recount assembly, the offset distance is a known constant. A threshold value is incorporated in the SIMS software. The threshold value is chosen to assure that a source at any location, equal to the release criteria, will be above the threshold on both detectors greater than 95% of the time. If either detector has a result less than the threshold value, a zero value is placed in that “pixel” on the coincidence display. Those areas will appear black, indicating no detectable activity above background. The process greatly reduces the number of false positives typically experienced in low level alpha surveys.

Beta Surveys: Beta background values are significantly higher than alpha background values, eliminating the “coincidence” counting approach used in alpha surveys. A single two-dimensional display is included in the beta survey reports. Within SIMS, the process for developing the data image is identical to that described above.

An additional feature of beta surveys is the inclusion of a cumulative frequency distribution (CFD) plot. The scale at the bottom of the plot is a linear scale in activity units, dpm/100 cm². The vertical scale the percentage of total measurements obtained. Each point on the curve represents the percent of total measurements at or below the value on the horizontal scale. The vertical scale is a statistical scale based the standard deviation of normally distributed data. A straight line would be indicative of normally distributed data. The slope of the line is related to the standard deviation. A more vertical line would indicate a small standard deviation. A lower slope, more horizontal line would represent a larger standard deviation. Contamination would be identified by data points that depart from the curve at the high end, i.e. outliers. Those data points would not fall within the normal distribution of background.

An example CFD plot is presented below:



The blue vertical line represents the 95% upper confidence level (UCL) of the data. With the large number of measurements obtained in each survey, the 95% UCL is close to the mean of the data. The green vertical line represents the 90th percentile of the data. Ninety percent of the data fall at or below the green line. Since beta surveys have a background value subtracted, a non-contaminated area would have approximately 50% of the data as negative values and 50 % positive. A 50 % value at or near zero is indicative of a valid reference area for the area surveyed.

Exception Report: Surveys that include areas in excess of the release criteria will contain an addition survey report section that includes both a color-graphic display similar to those discussed above, with red spots indicating areas above the release criteria on a green background. An investigation table is also included that lists in order of descending activity, the activity level, location from the southwest corner of the survey (X,Y) coordinates, and the location from the SW of the strip (X,Y). Since strip numbers are marked in the field, the investigation allows for ease in locating the elevated activity.

Survey Report

Survey File Name:	FA0101A
Survey Date:	November 24, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

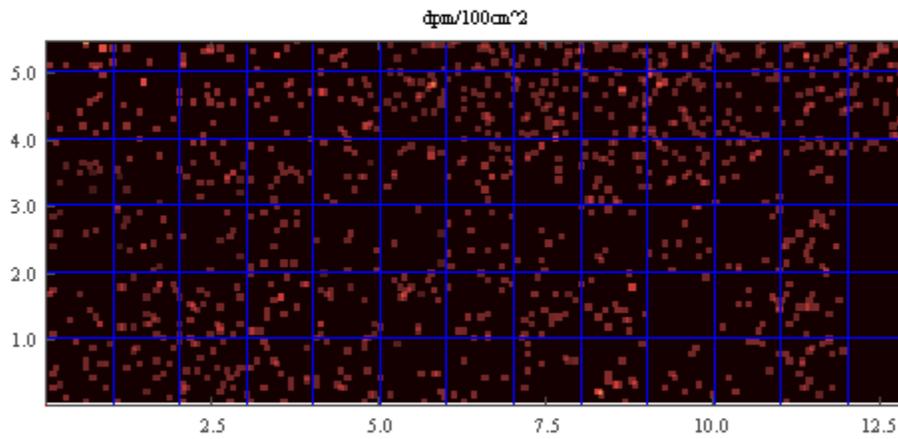


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

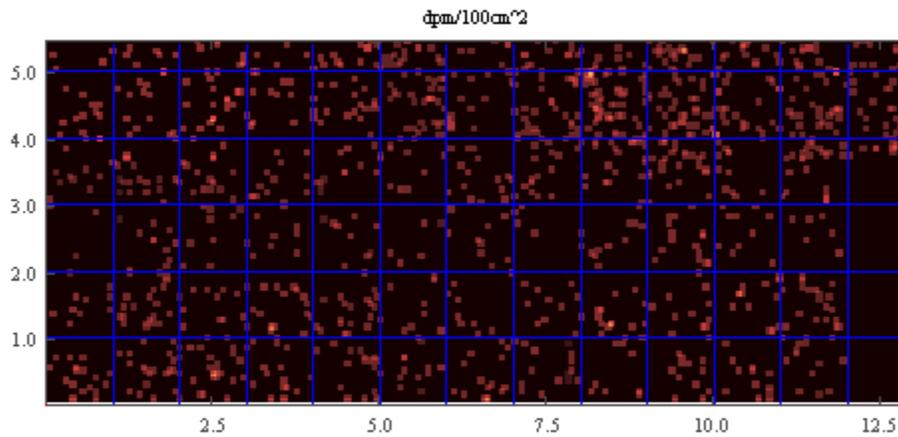


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

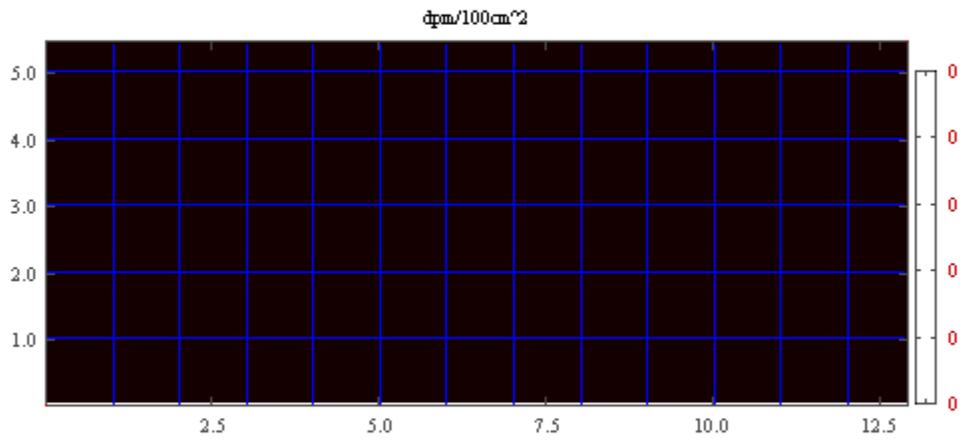


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0111A
Survey Date:	November 24, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

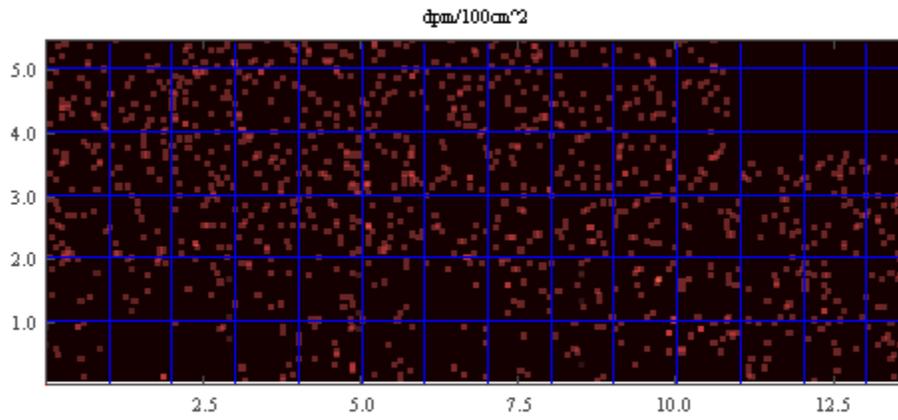


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

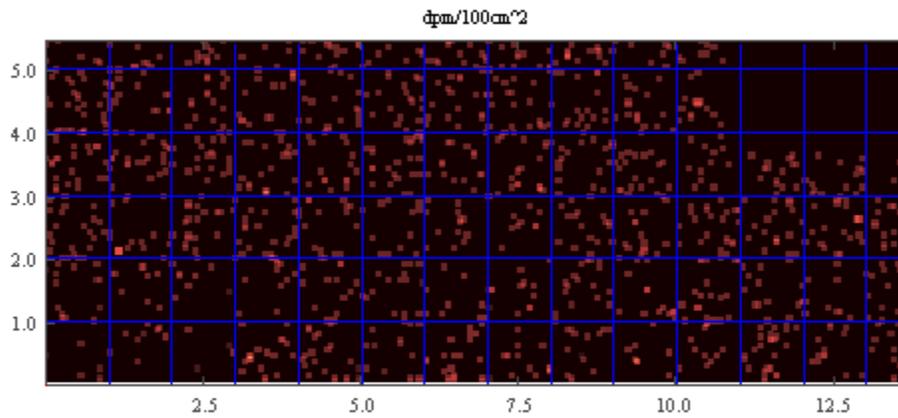


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

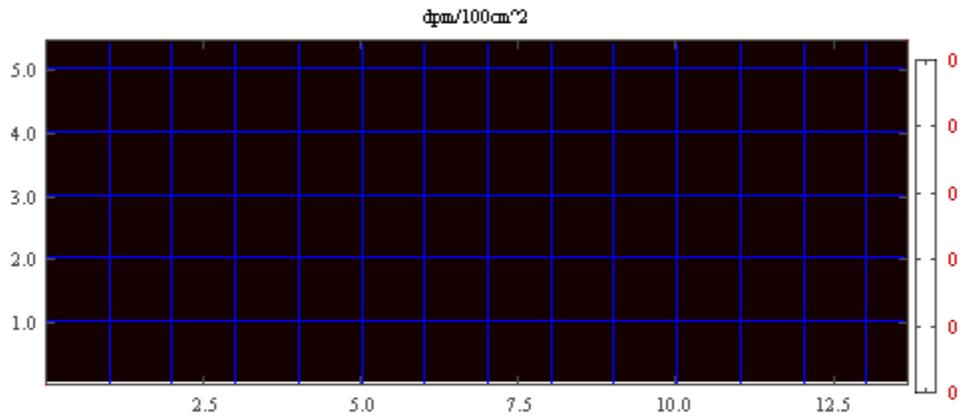


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0121A
Survey Date:	December 13, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

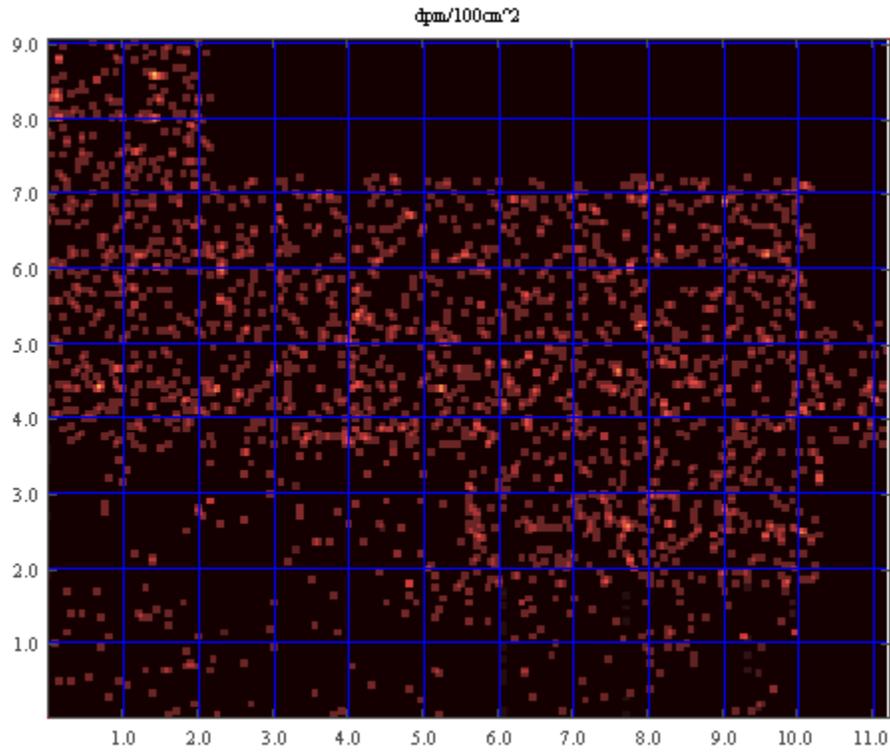


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

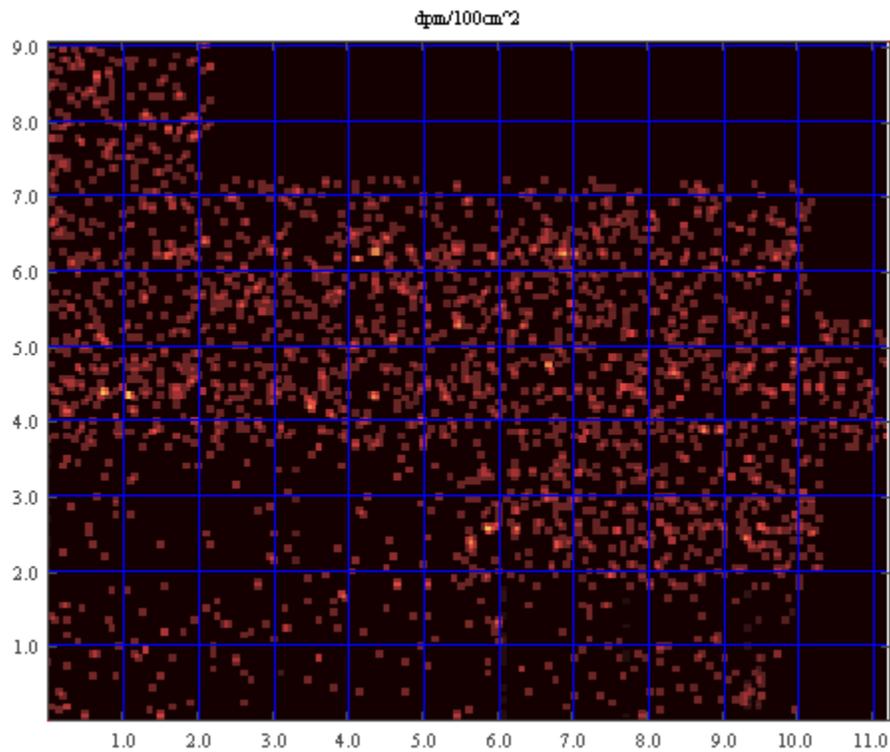


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

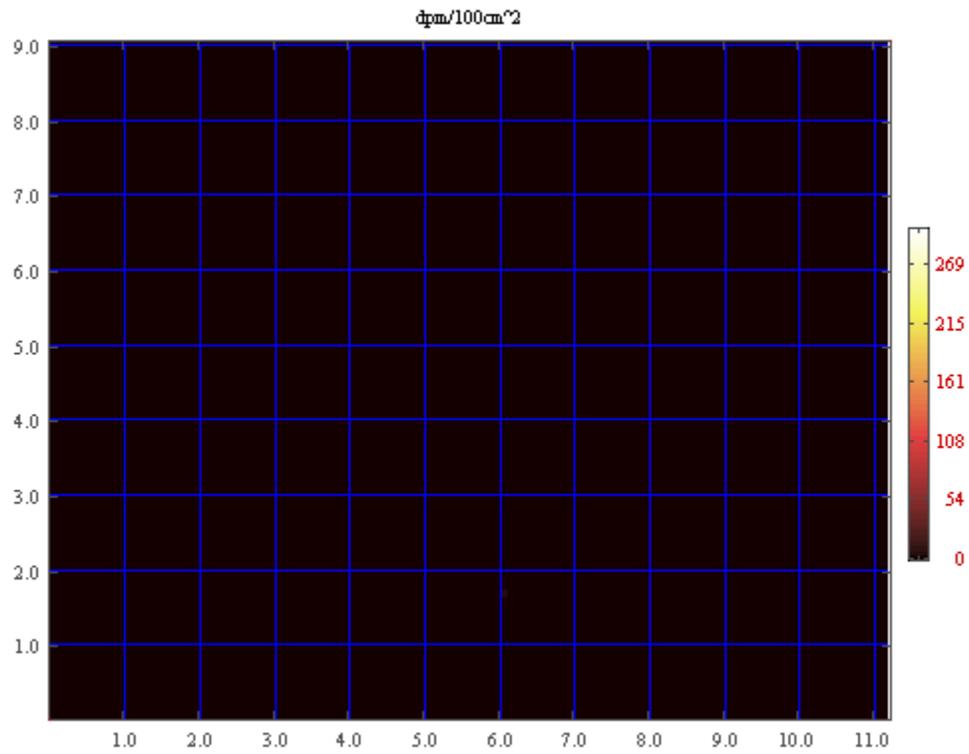


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0121B
Survey Date:	December 13, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

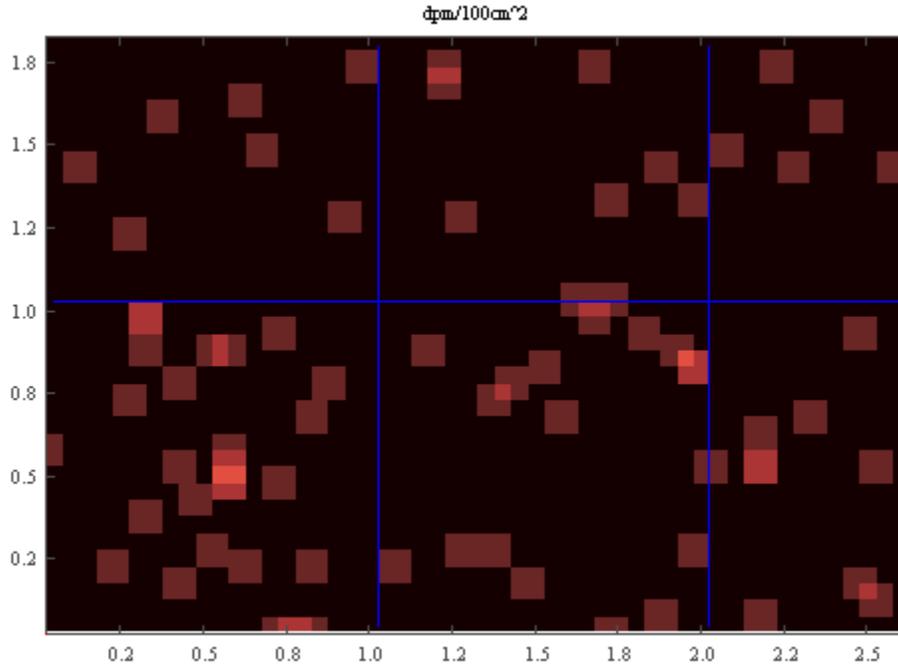


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

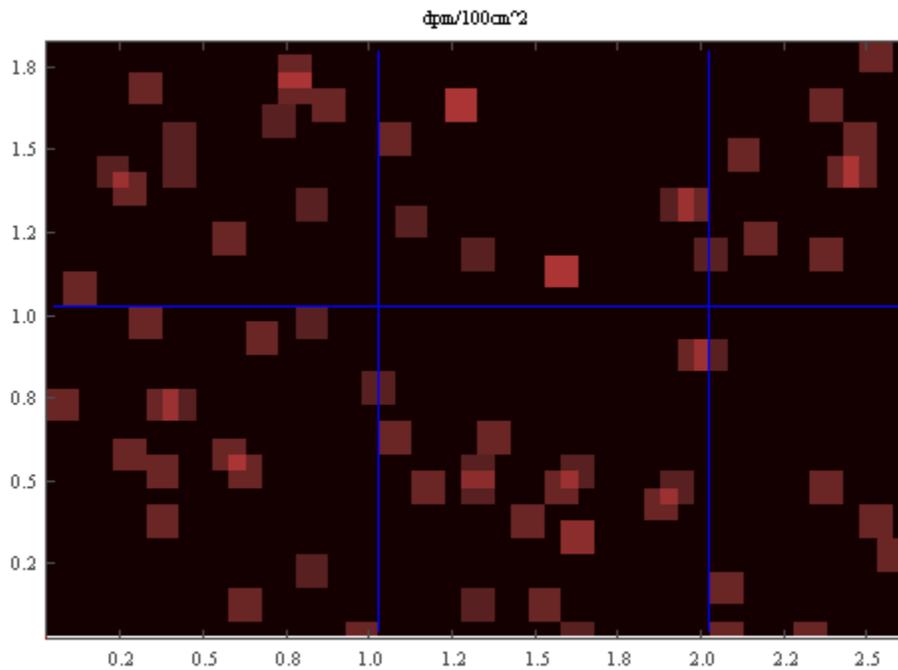


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

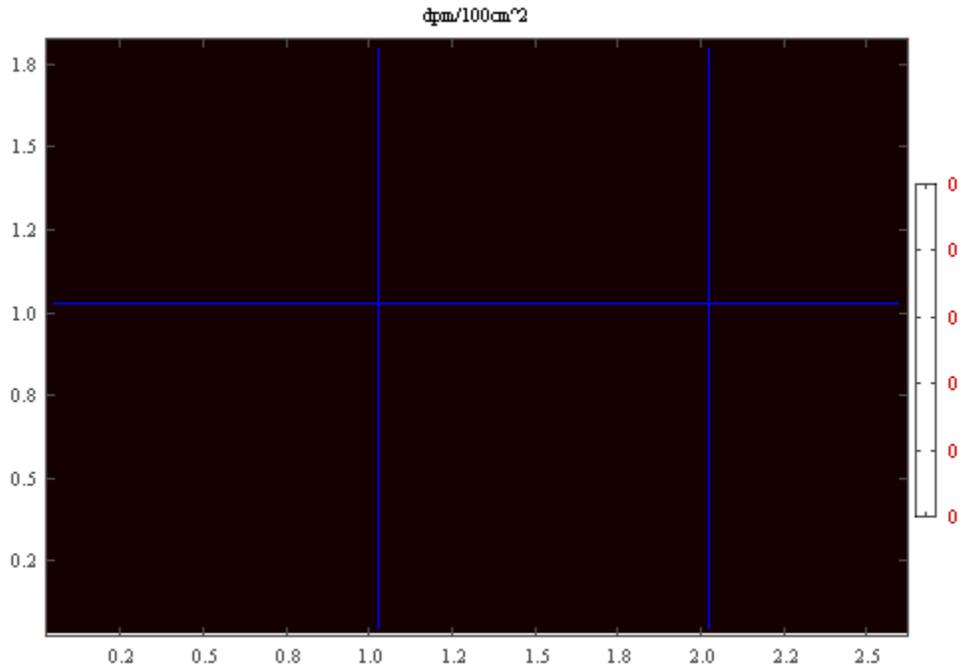


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0131A
Survey Date:	December 13, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

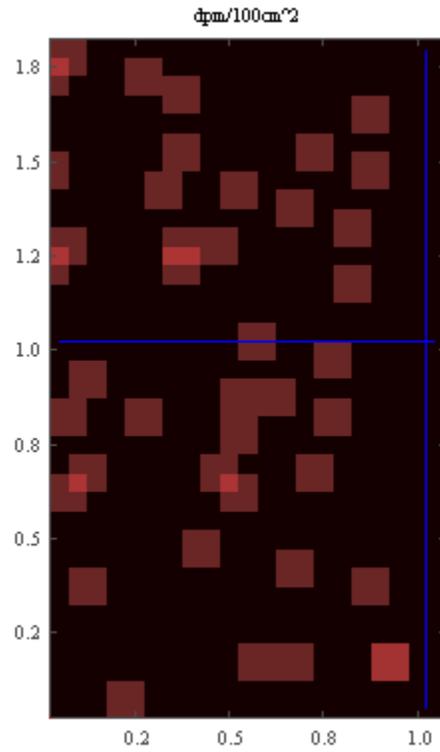


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

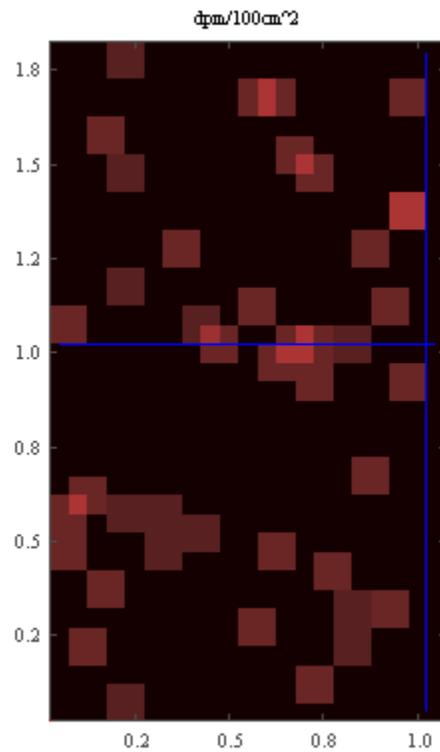


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

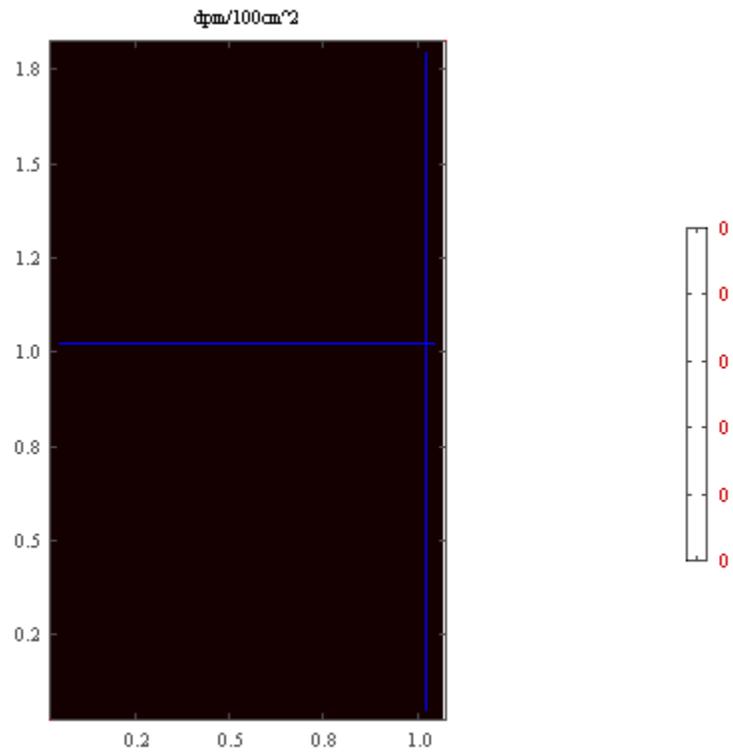


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0201A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

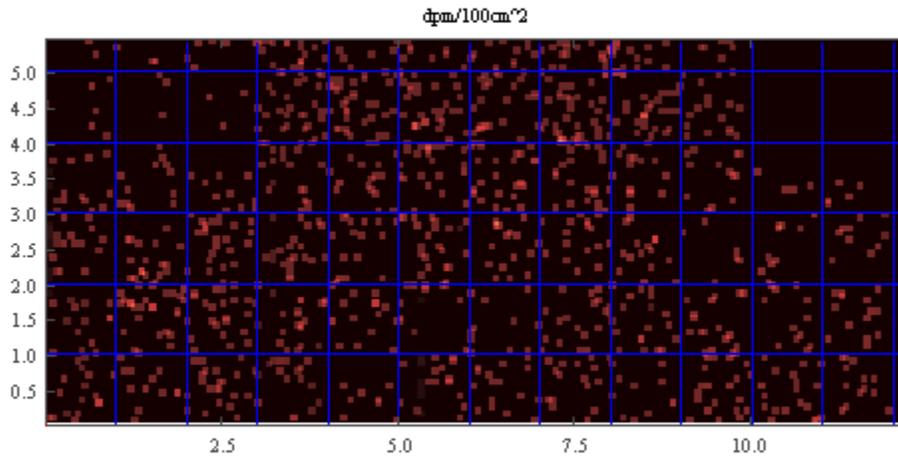


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

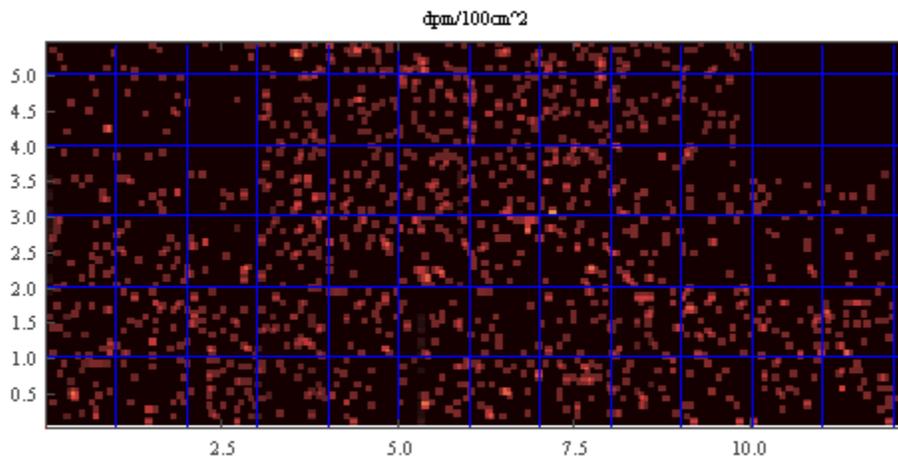


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

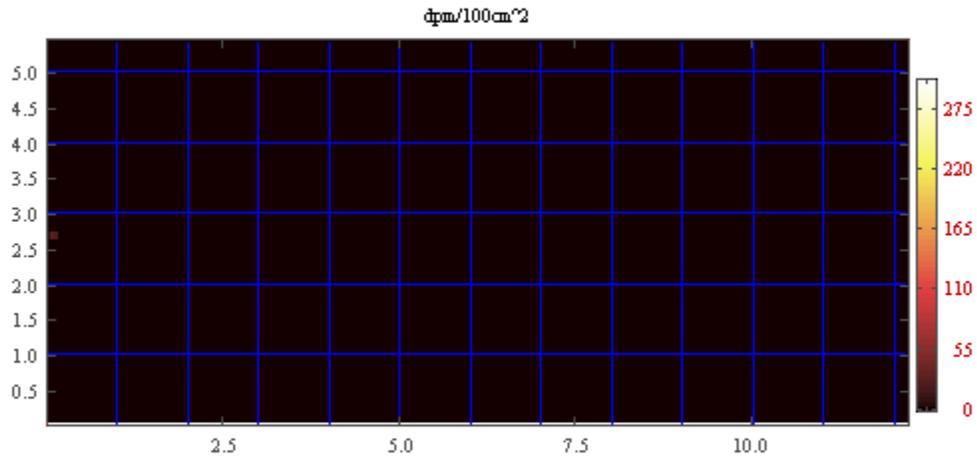


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0211A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

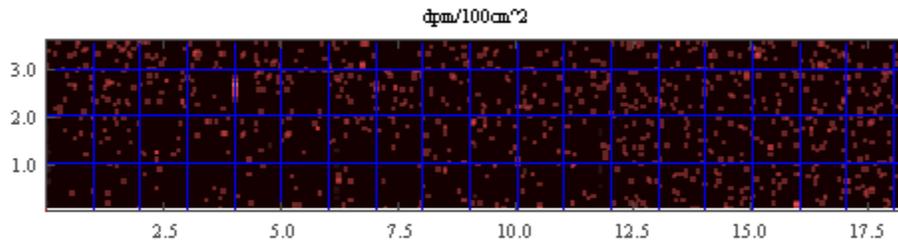


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

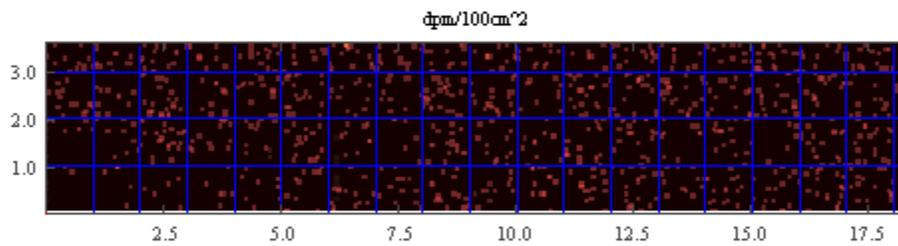


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

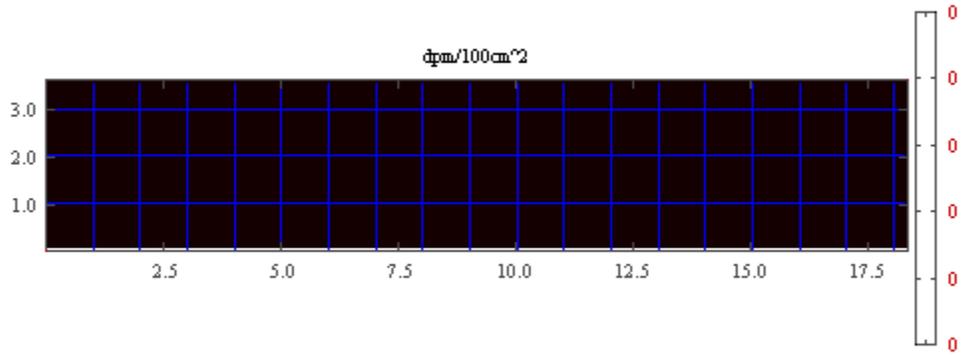


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0221A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

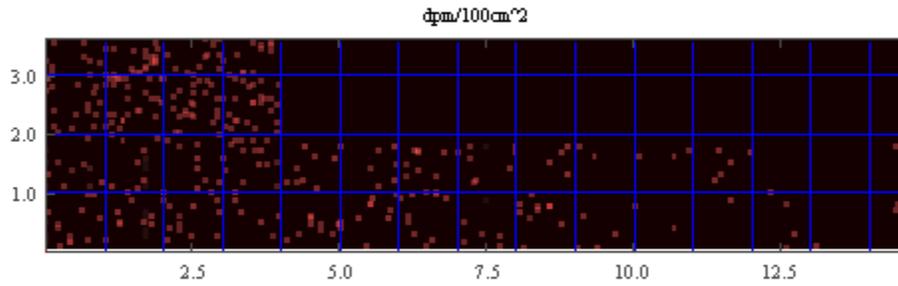


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

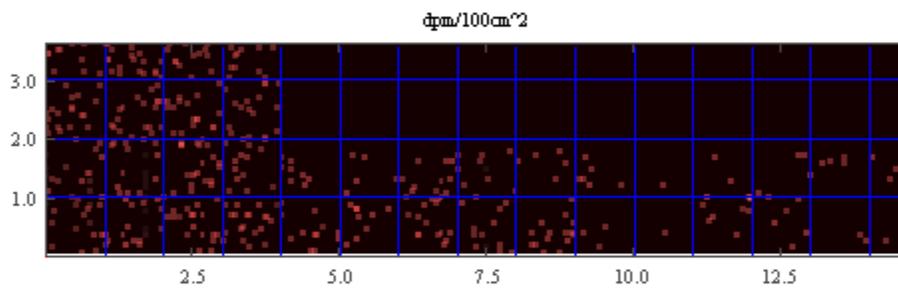


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

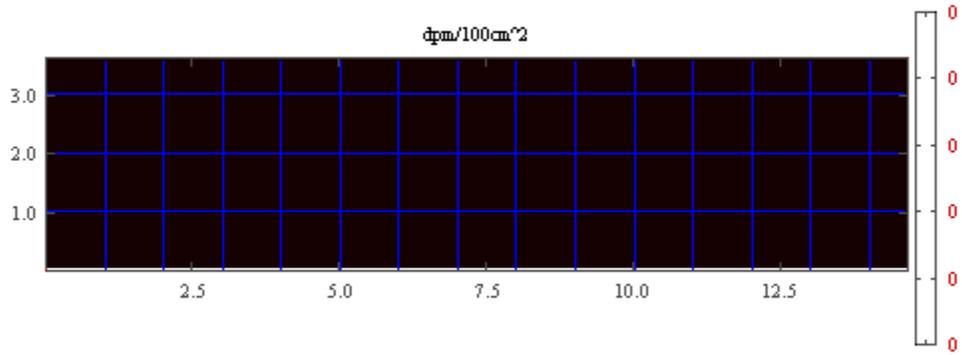


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0231A
Survey Date:	November 19, 2010
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

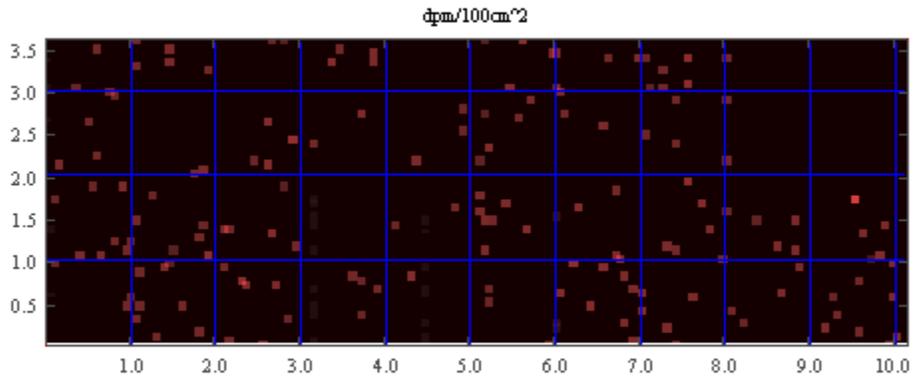


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

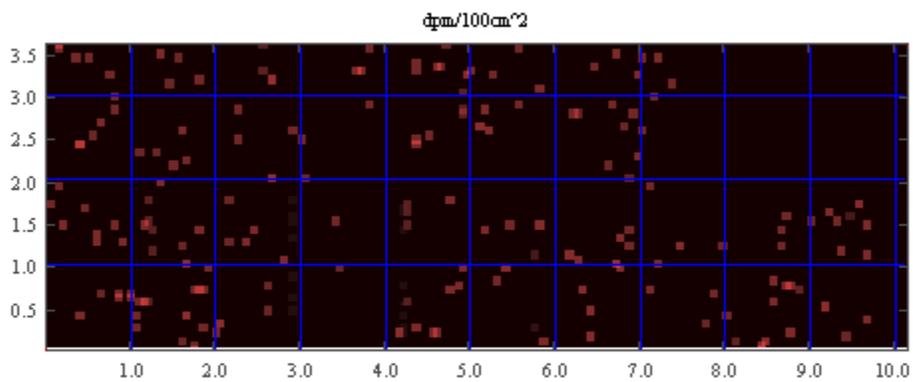


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA0301A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

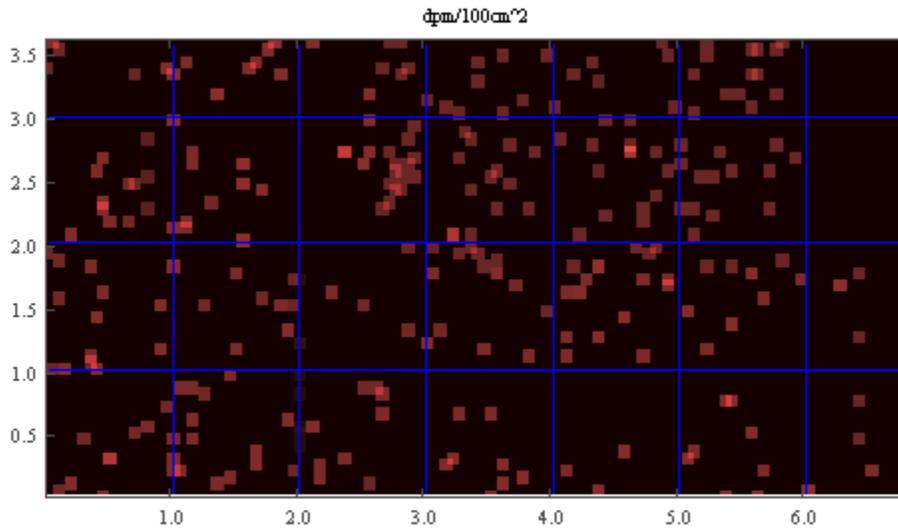


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

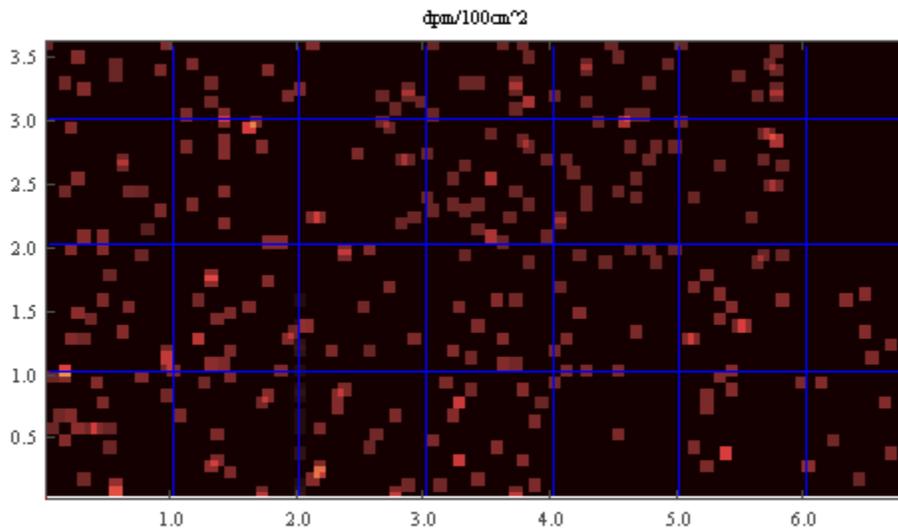


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

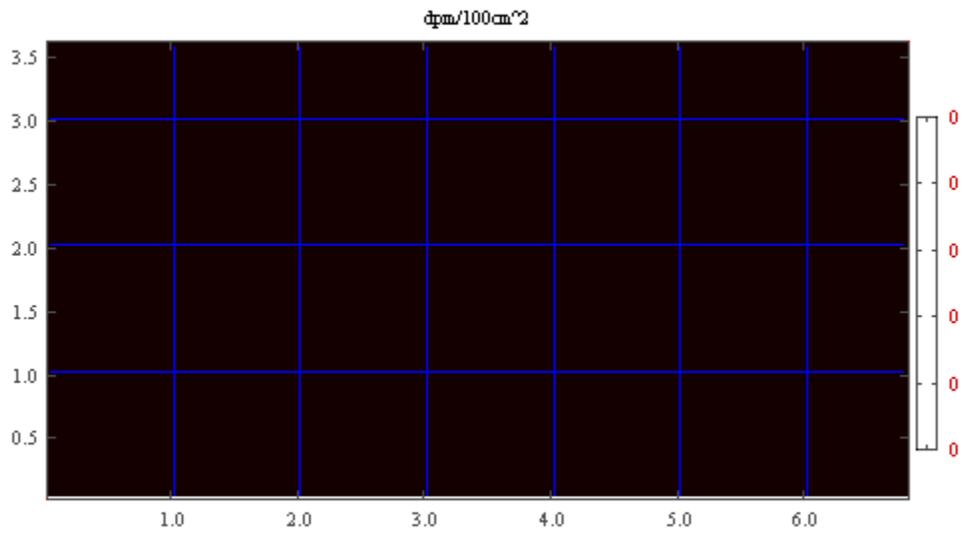


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0311A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

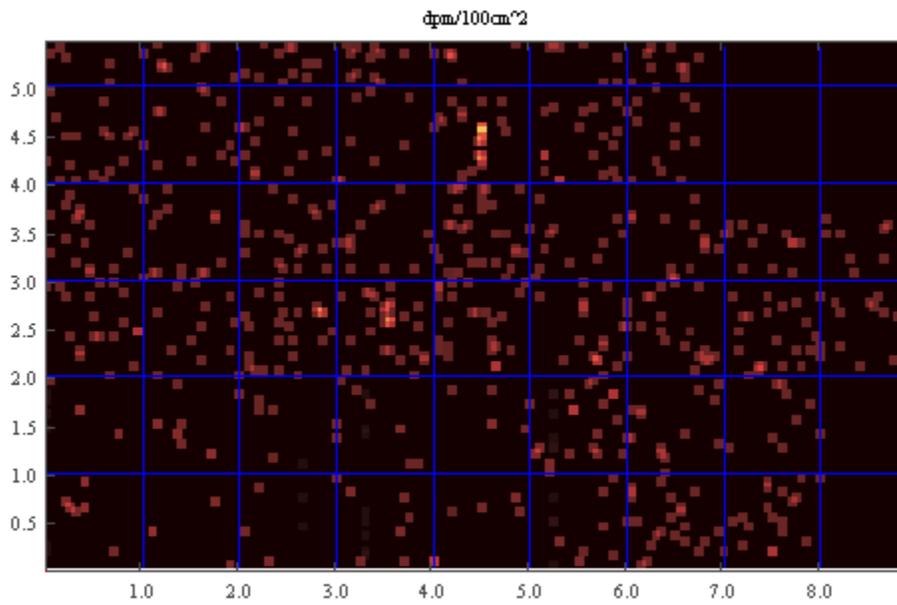


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

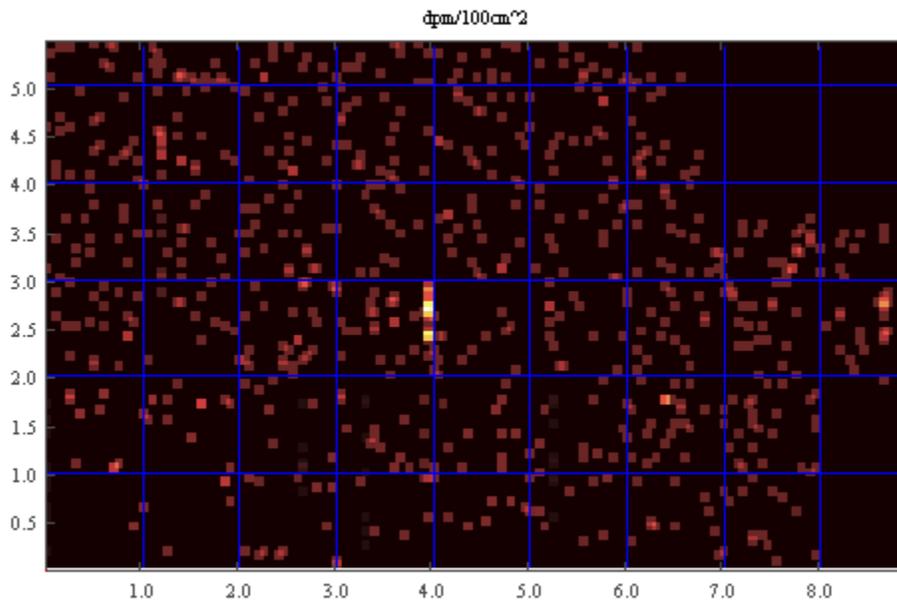


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA0321A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

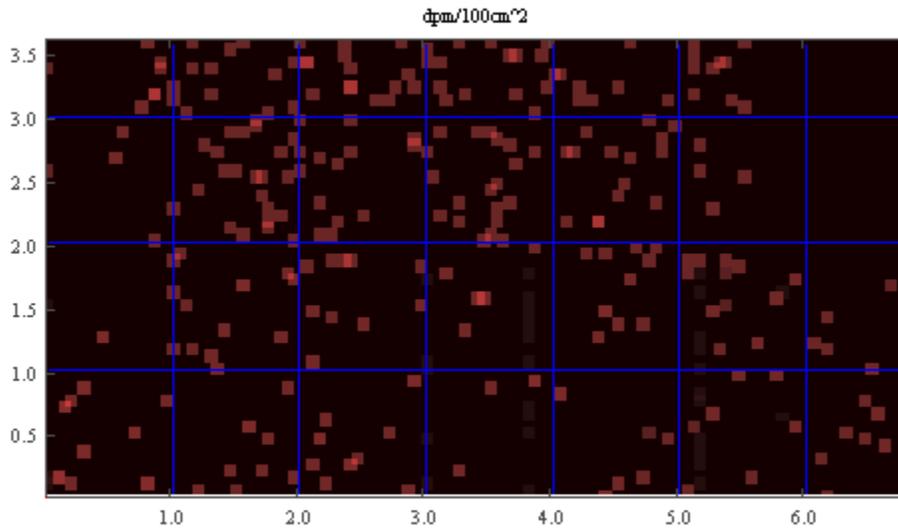


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

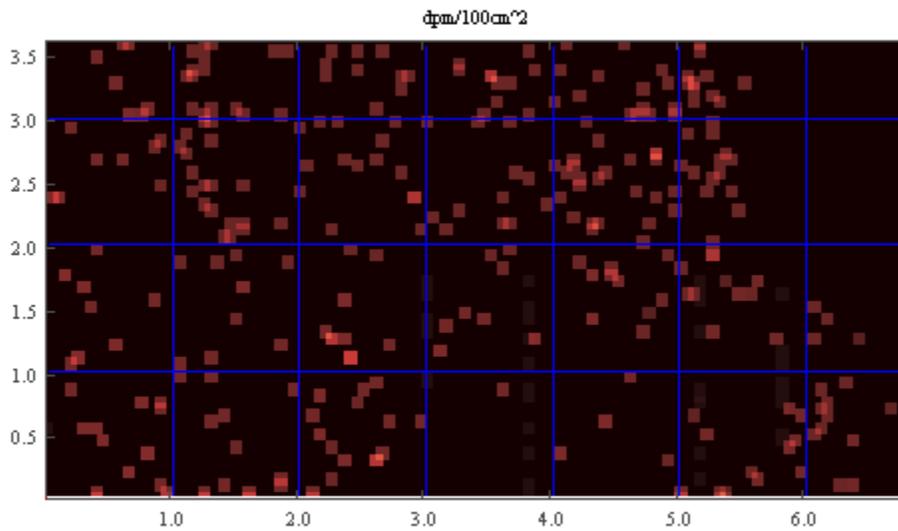


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

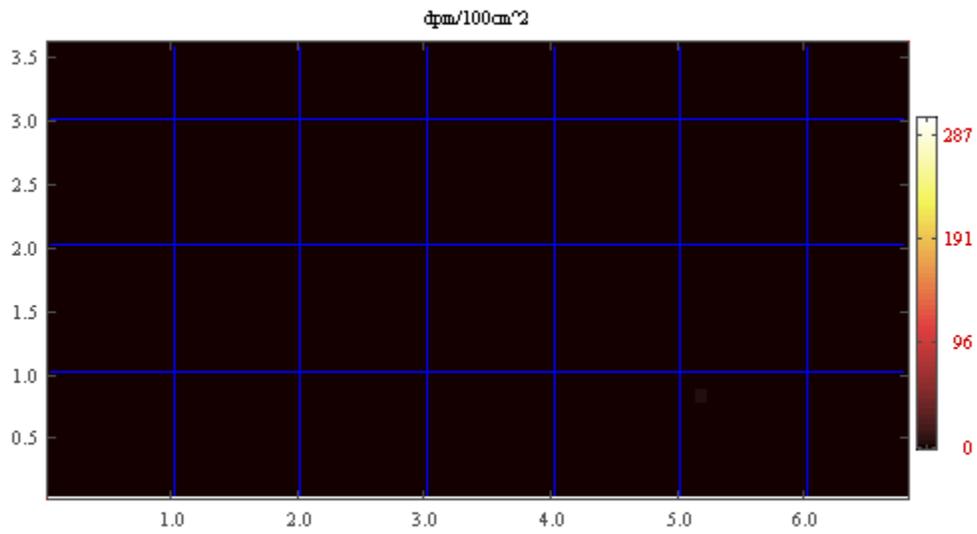


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0331A
Survey Date:	November 19, 2010
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

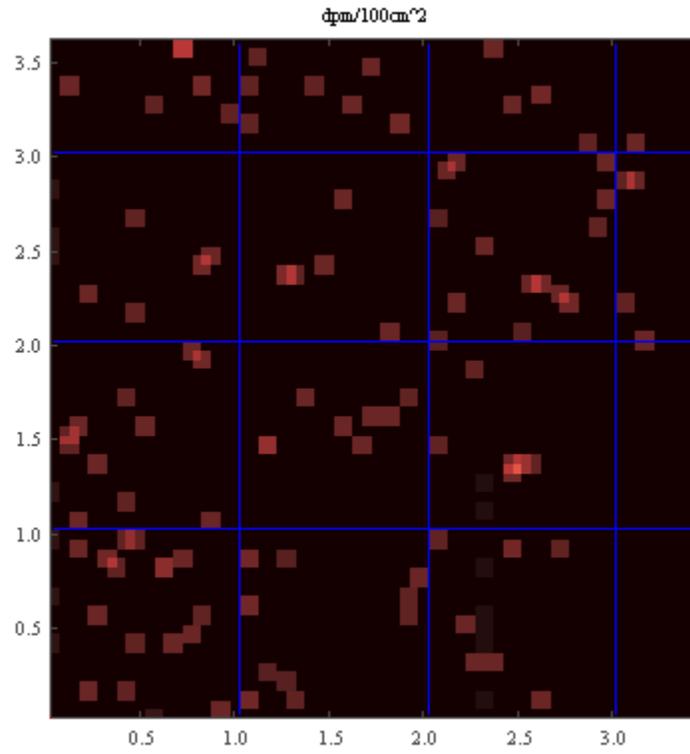


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

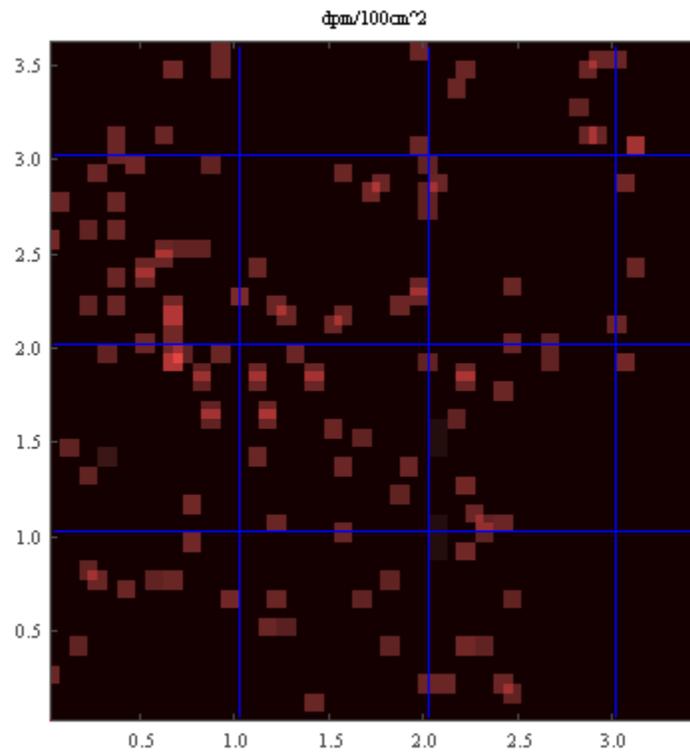


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

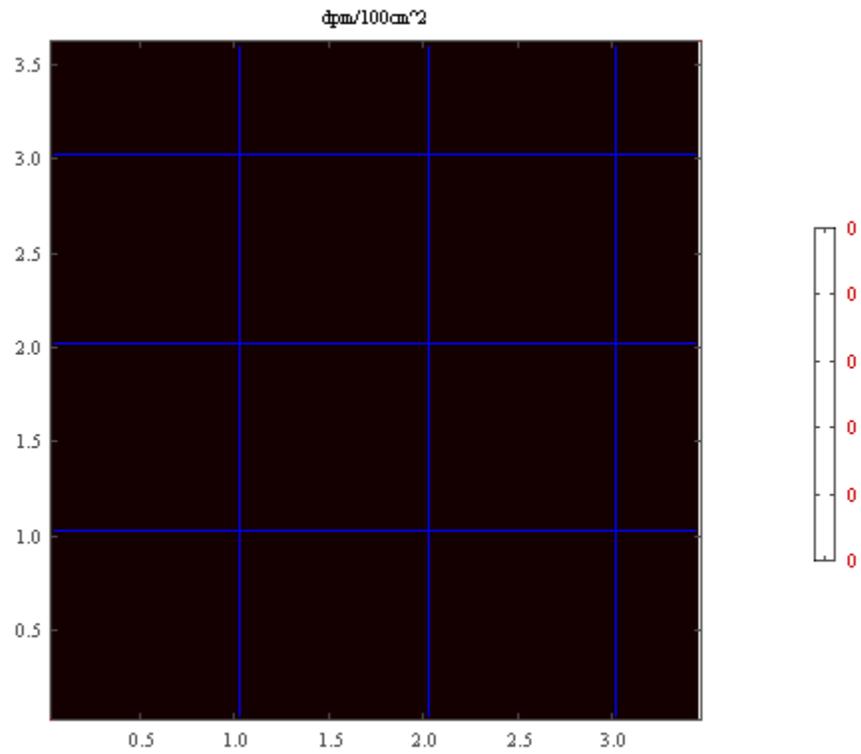


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0401A
Survey Date:	November 17, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

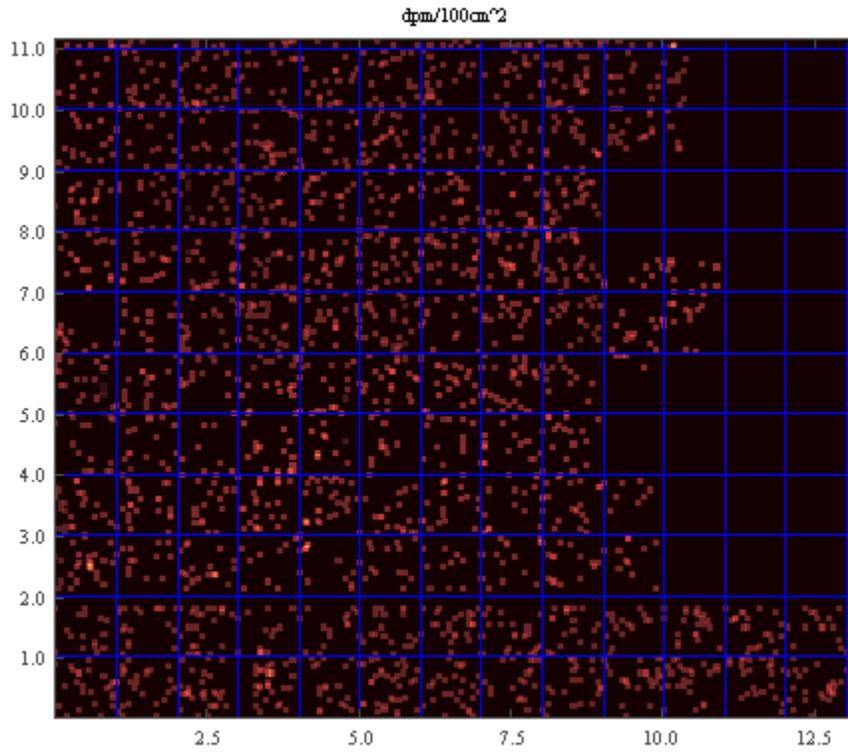


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

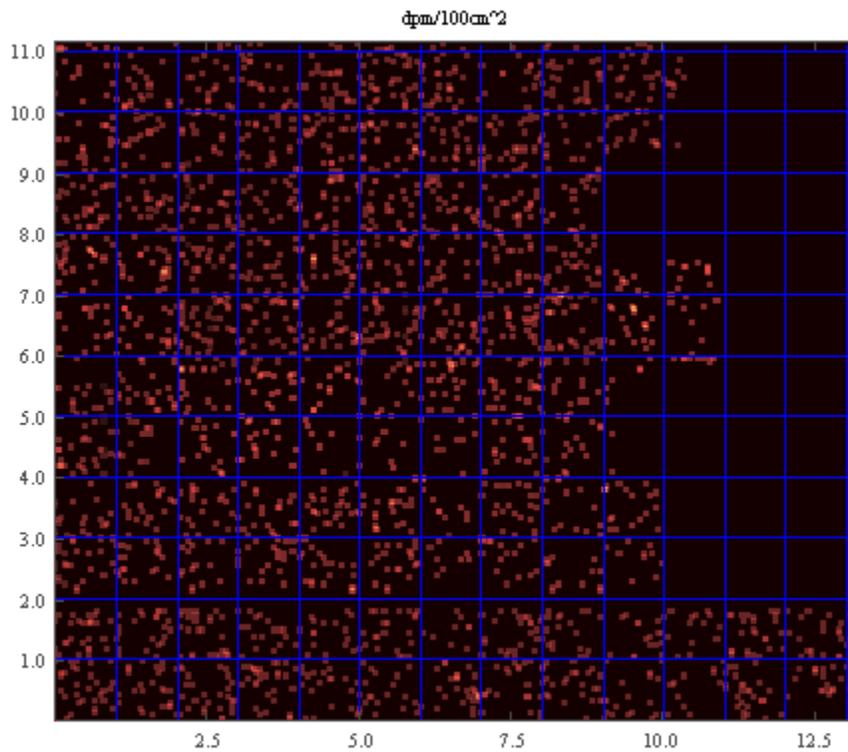


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

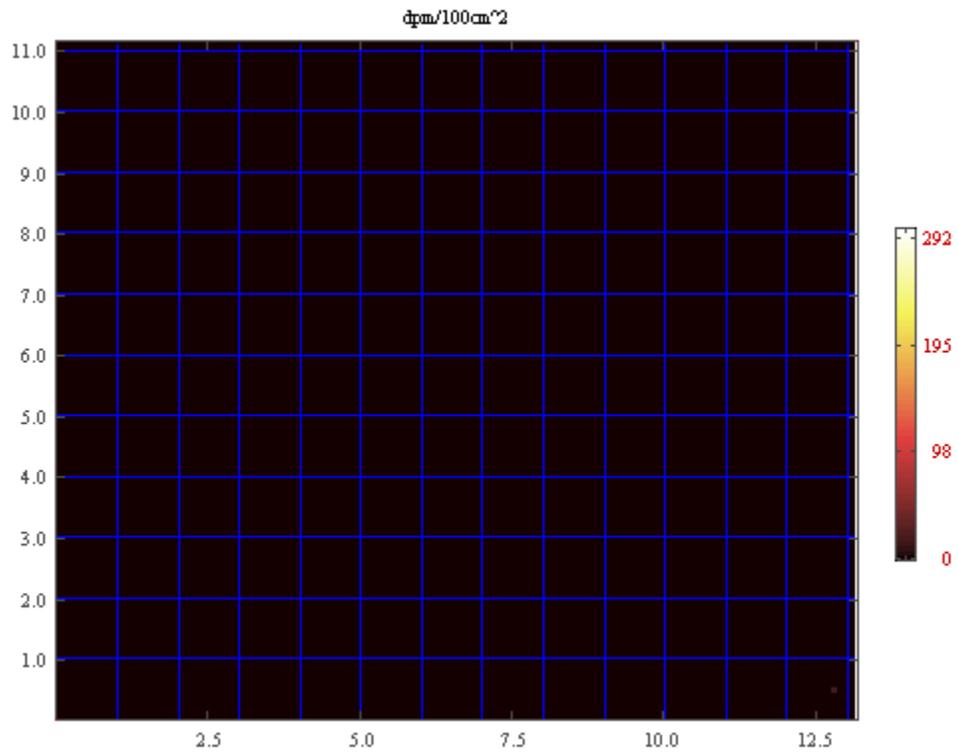


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0411A
Survey Date:	November 17, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	507 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.15 m ²

This survey is not position correlated.

Primary Detector:

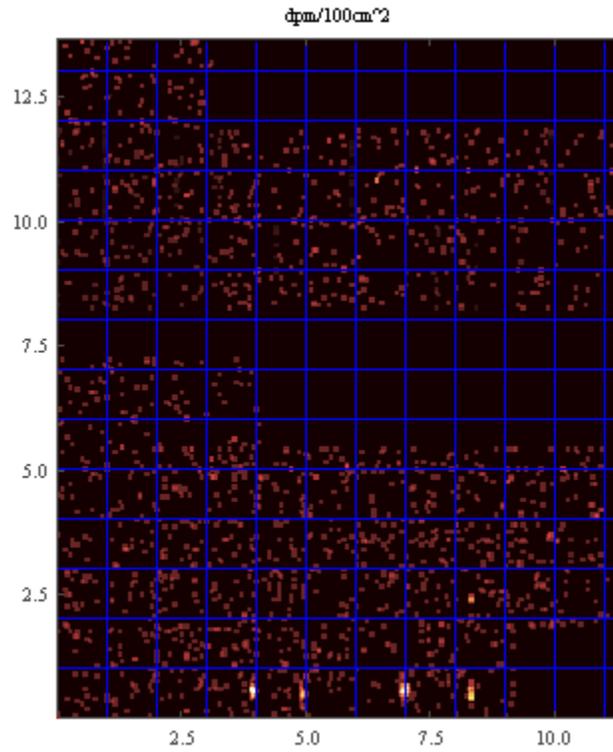


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

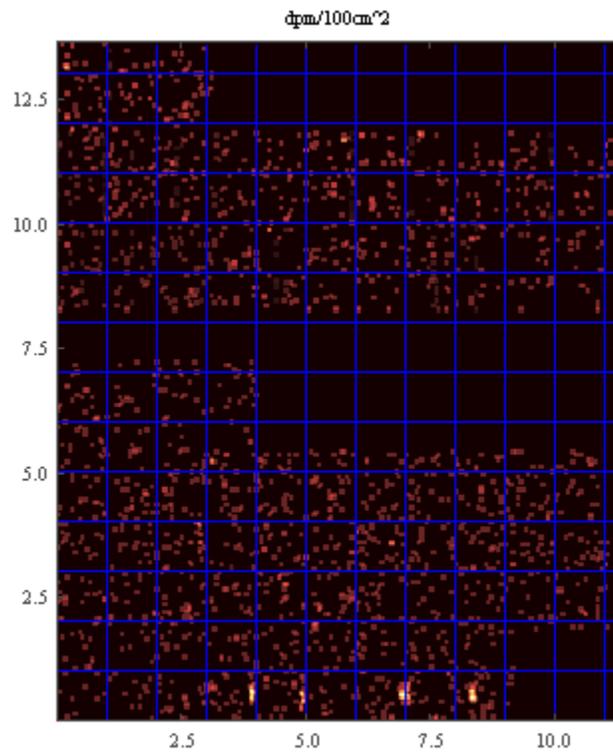


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

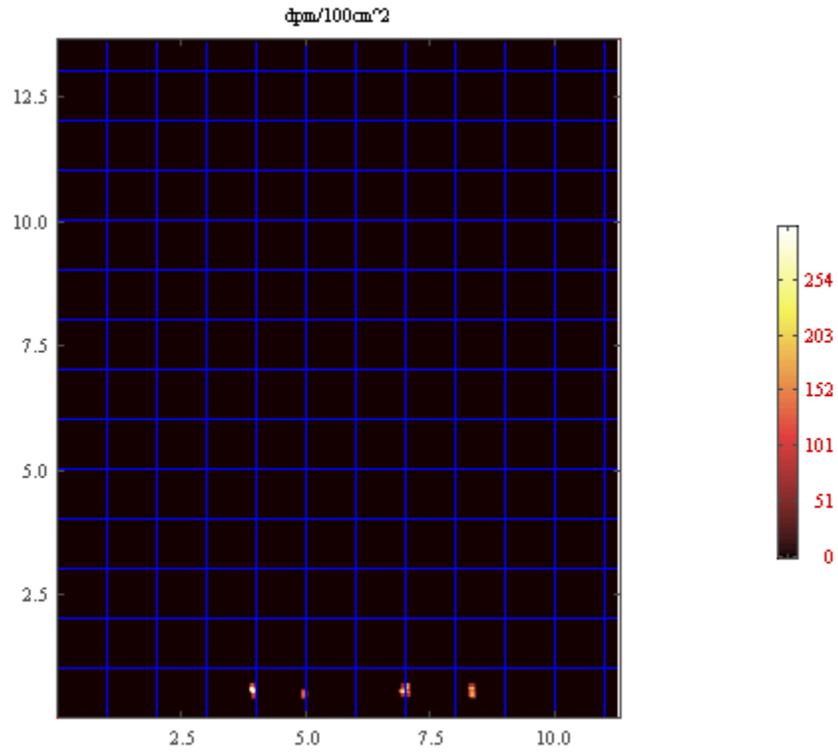


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

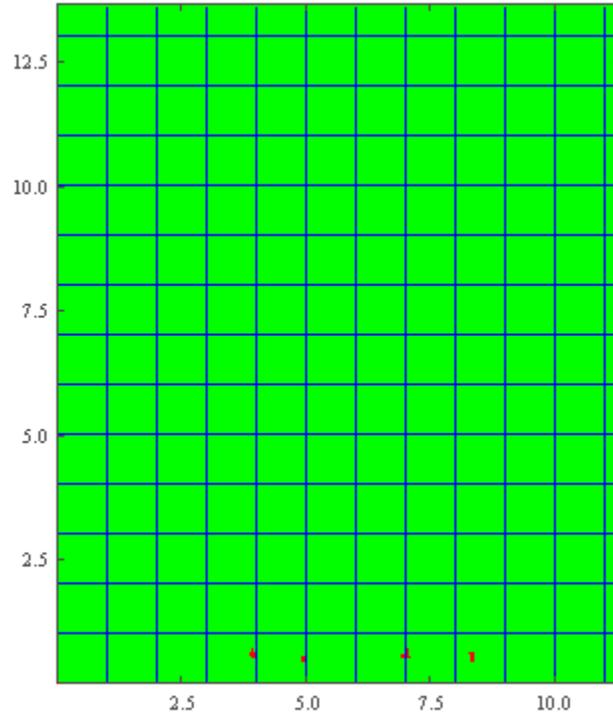


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	507	97	(395,60)	(0,50)	N/A		
Spot	234	157	(700,65)	(5,55)	N/A		
Spot	195	185	(835,65)	(0,55)	N/A		
Spot	176	185	(835,50)	(0,40)	N/A		
Spot	136	117	(500,50)	(5,40)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0421A
Survey Date:	November 22, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	EATON/CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

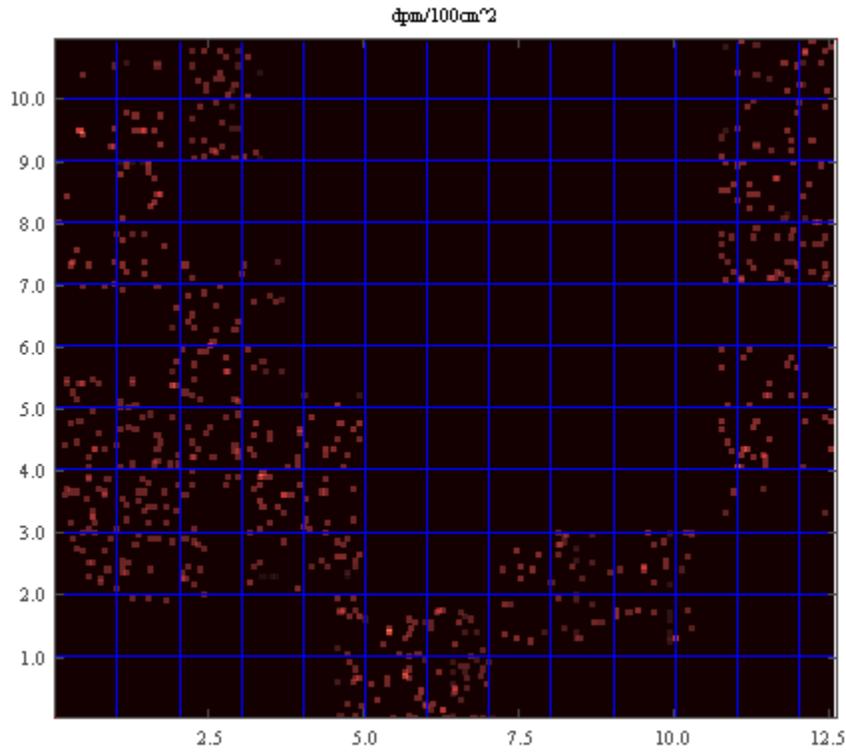


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

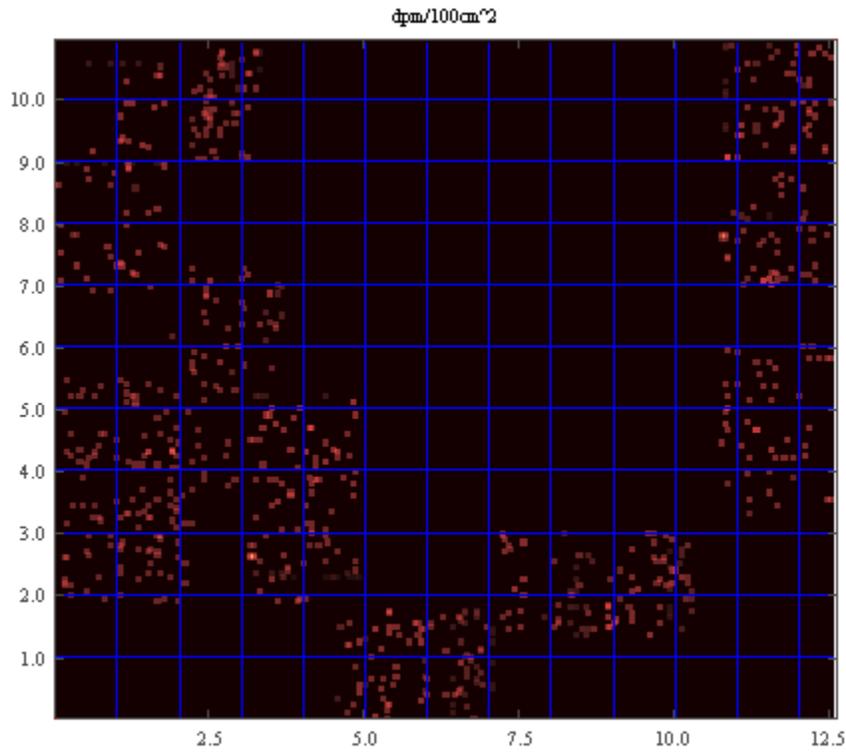


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

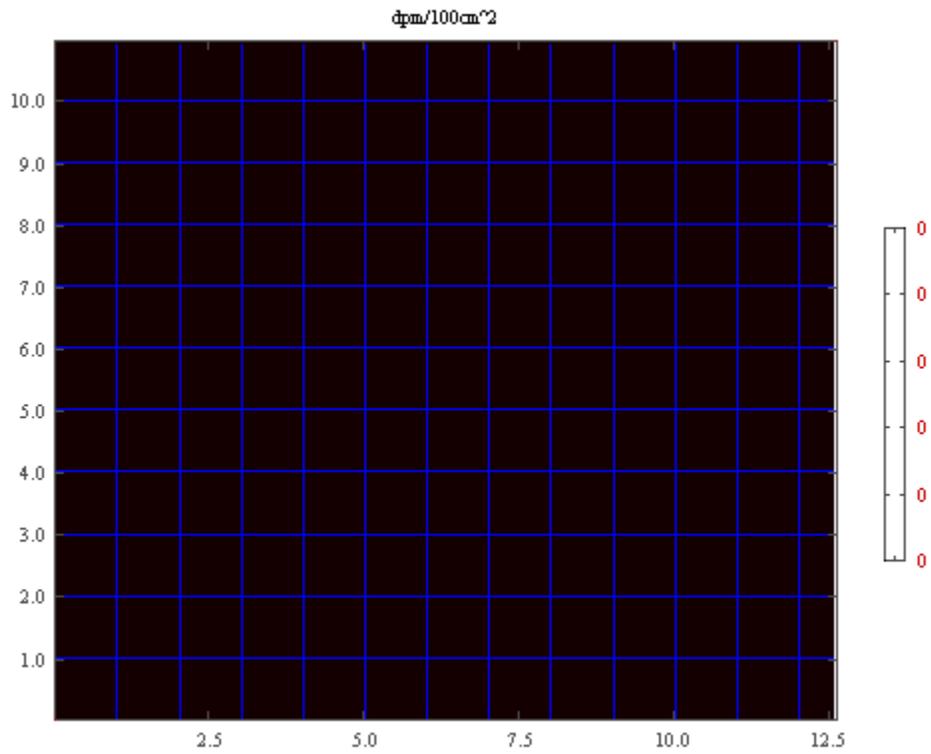


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0431A
Survey Date:	November 20, 2010
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

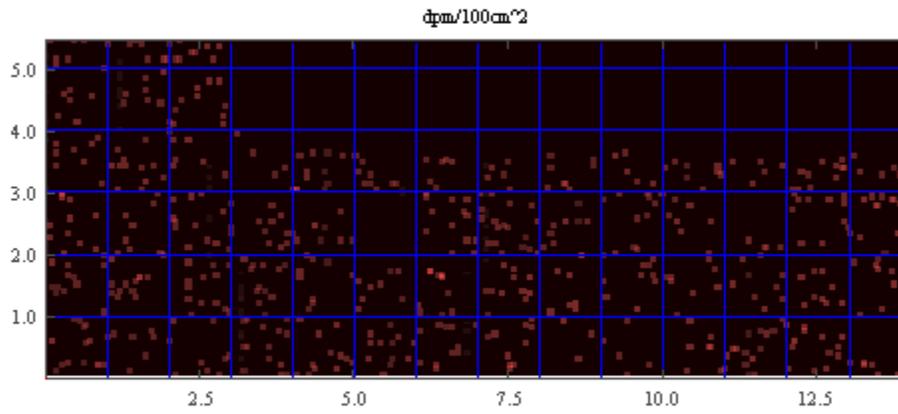


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

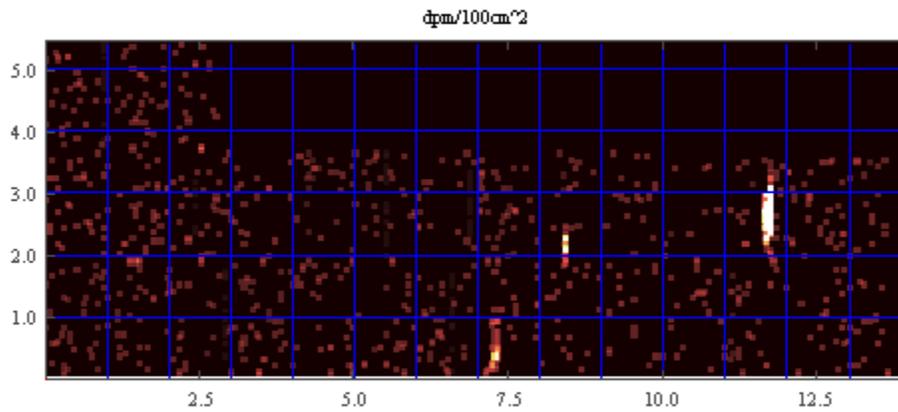


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

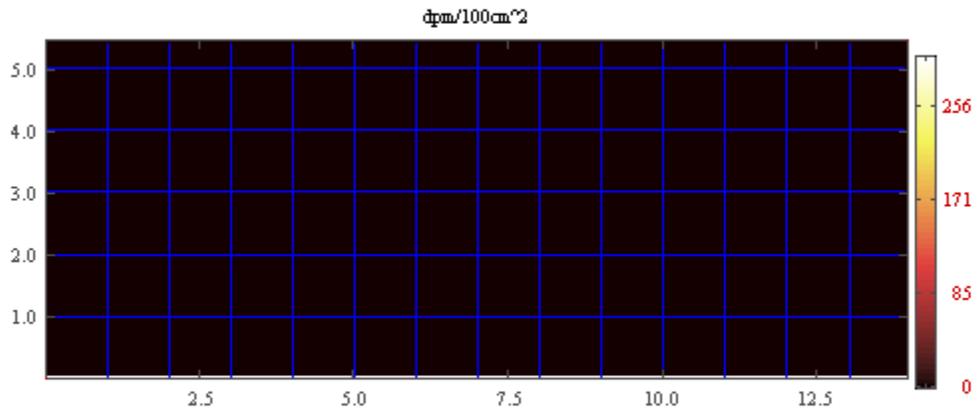


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0501A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

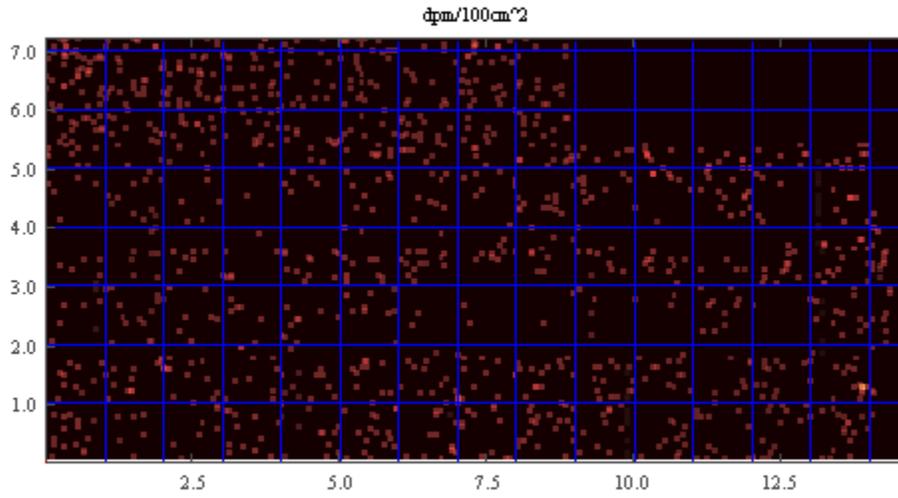


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

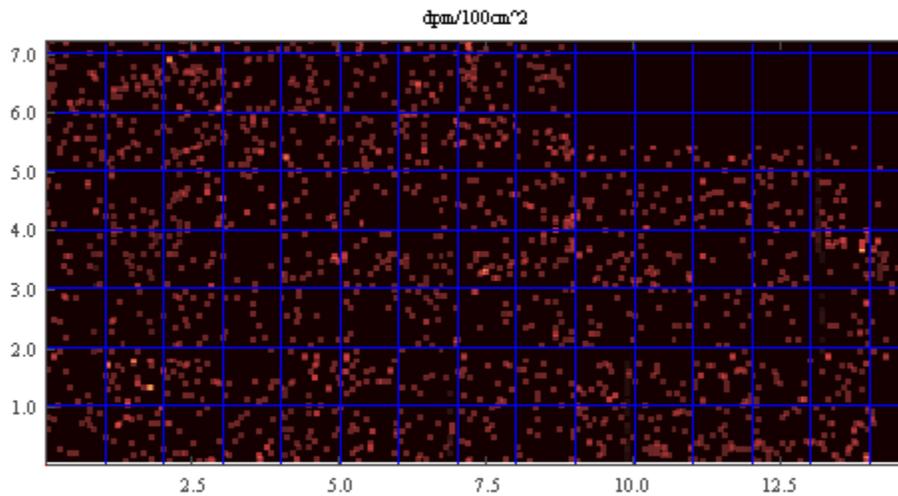


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

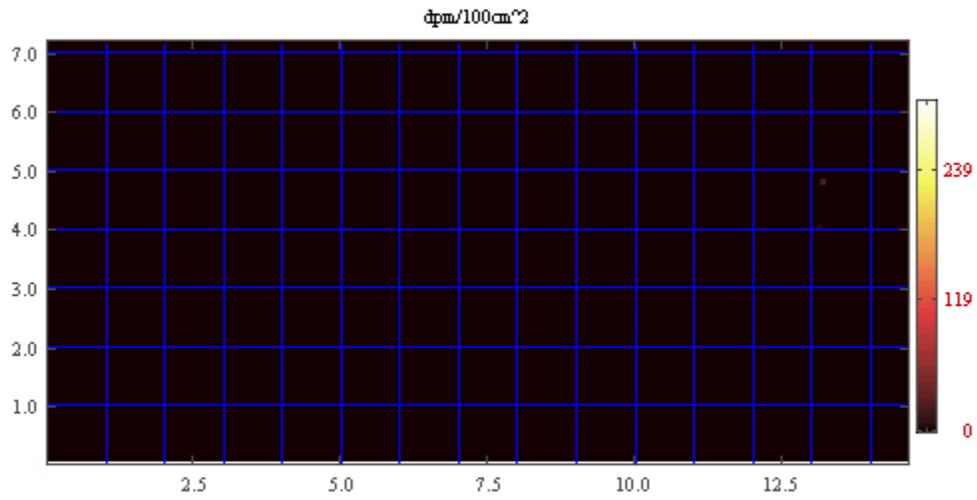


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0511A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

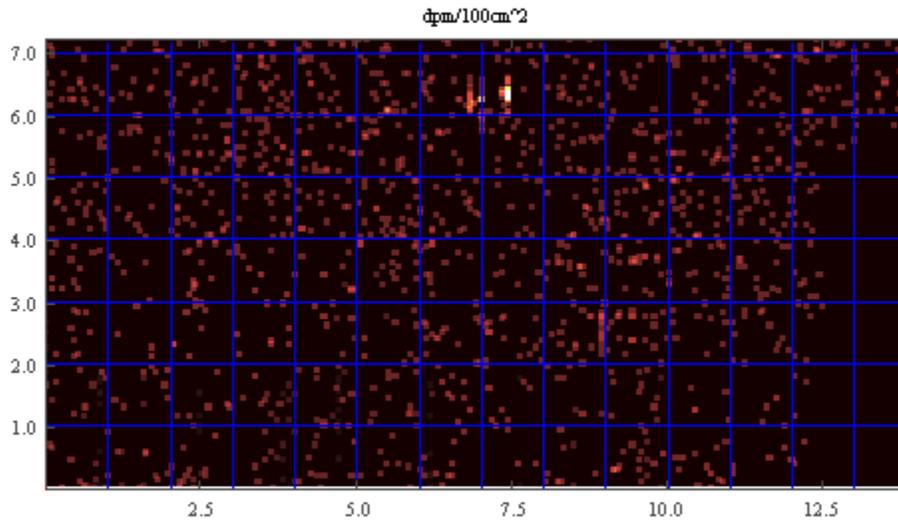


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

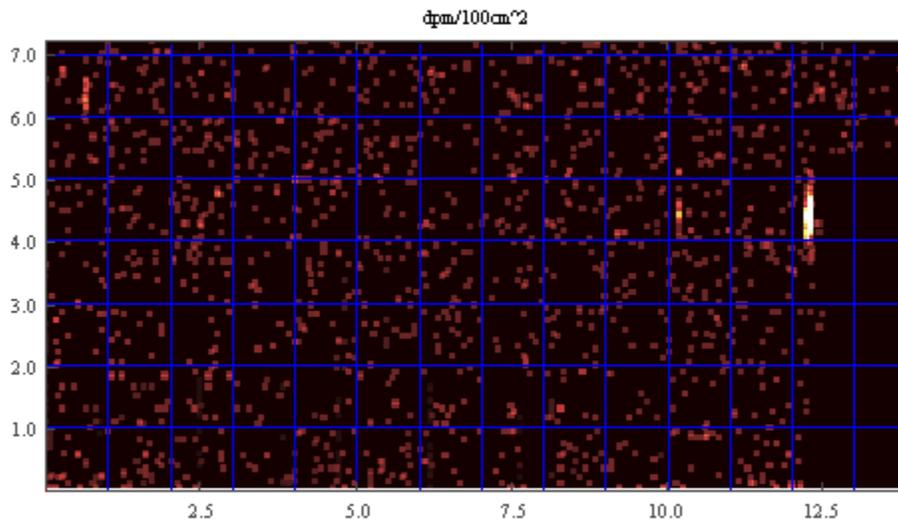


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

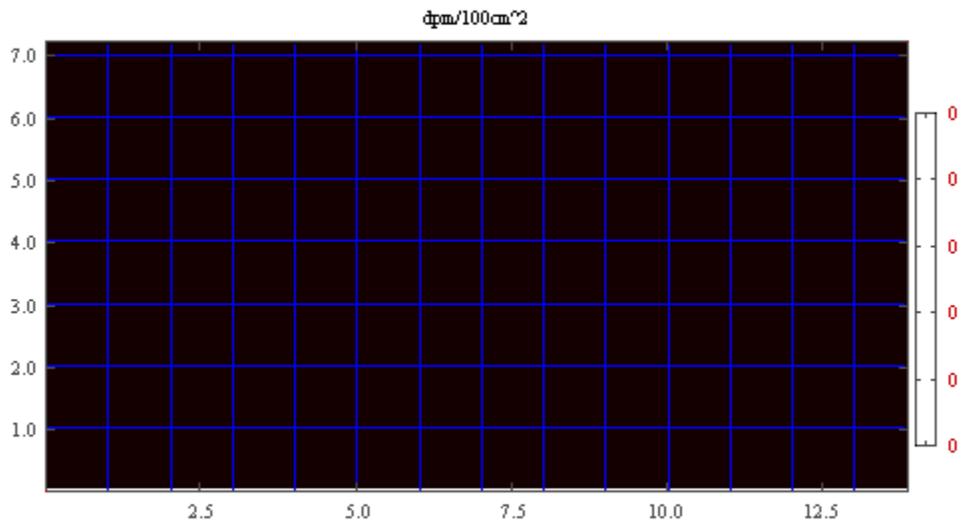


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0521A
Survey Date:	November 23, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

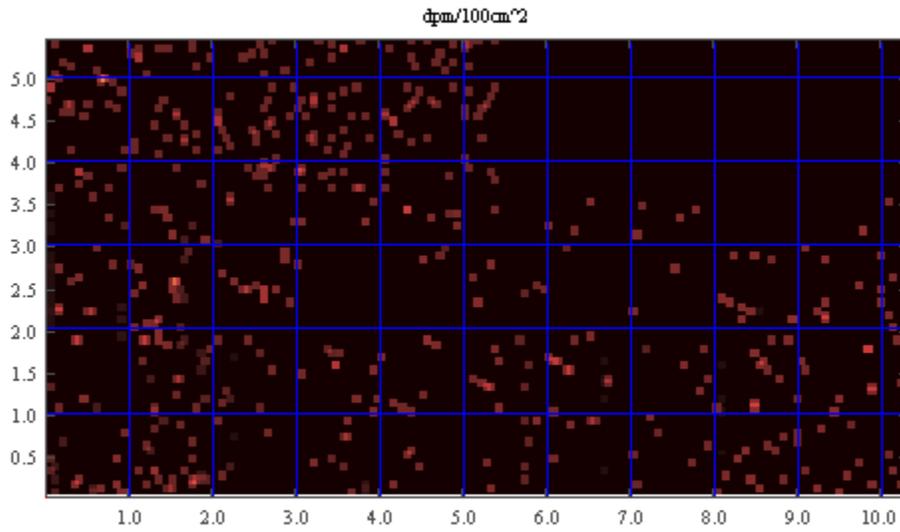


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

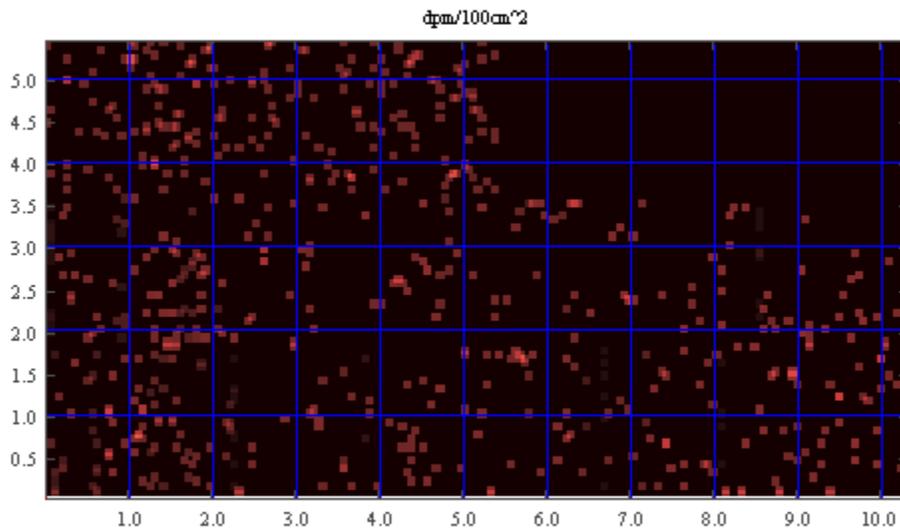


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

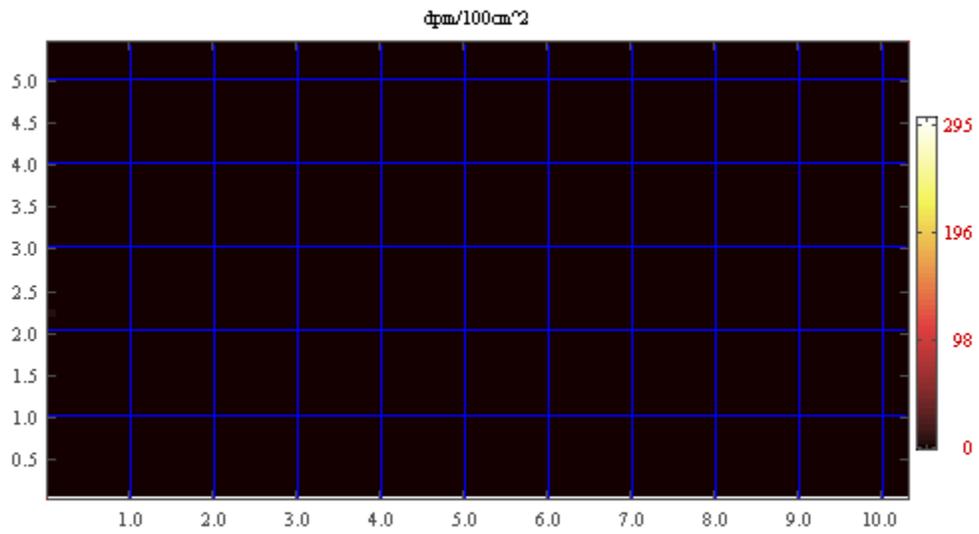


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0531A
Survey Date:	November 19, 2010
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

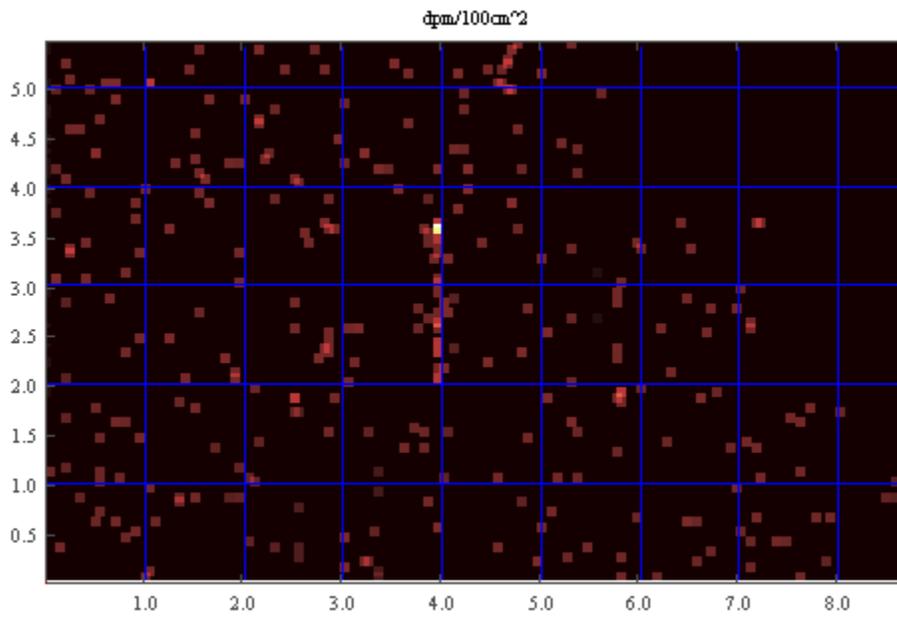


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

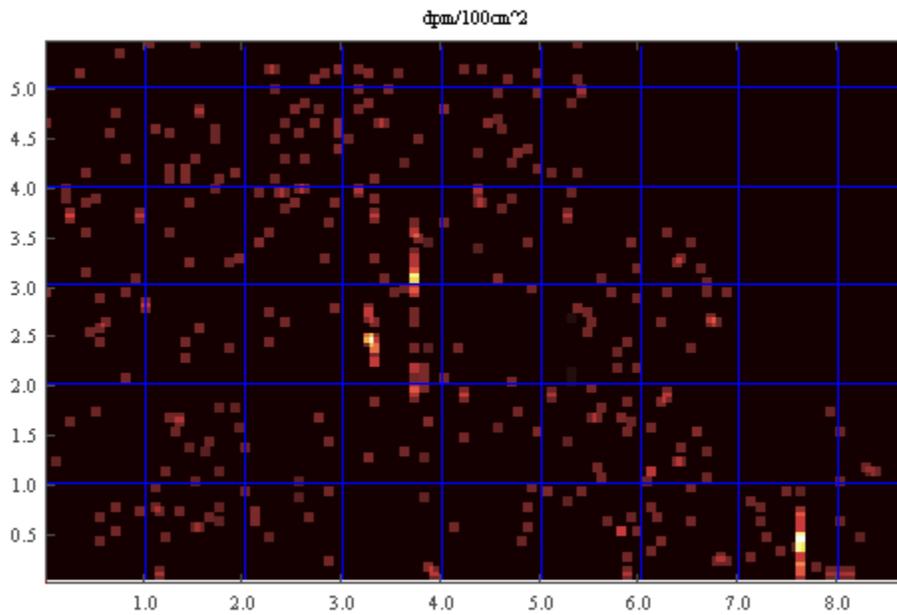


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

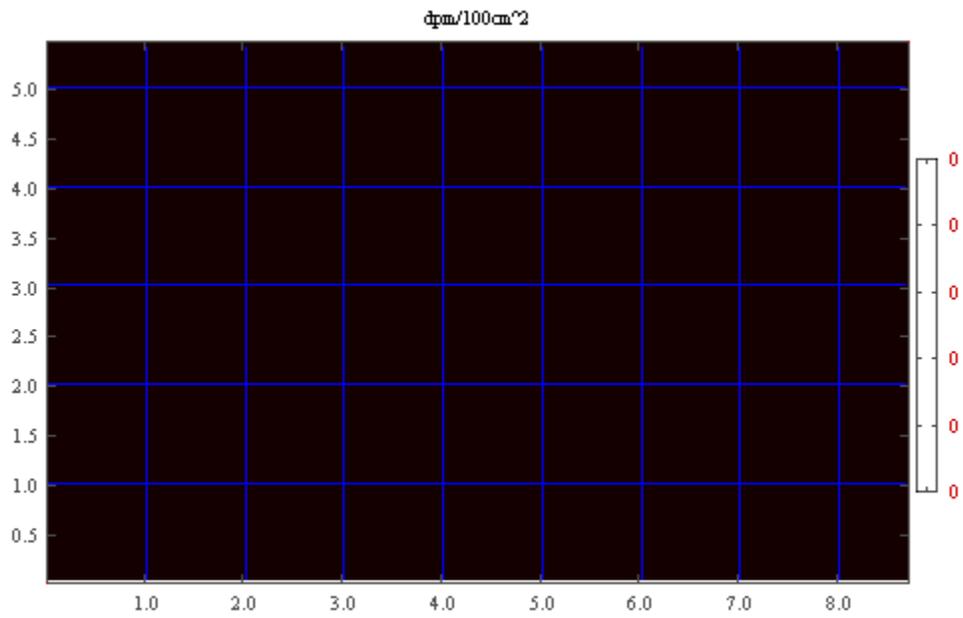


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0601A
Survey Date:	November 22, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

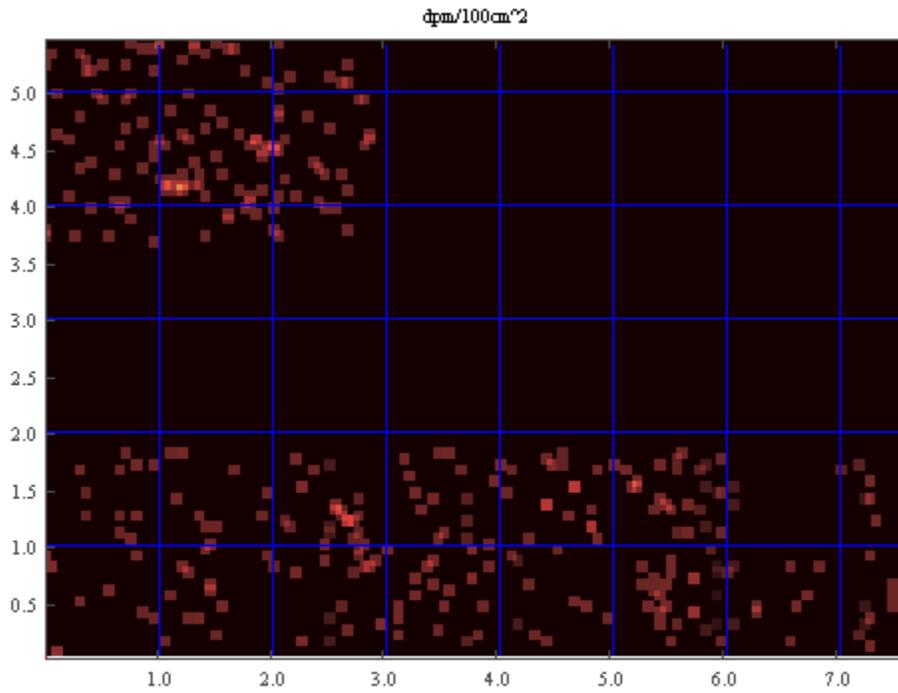


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

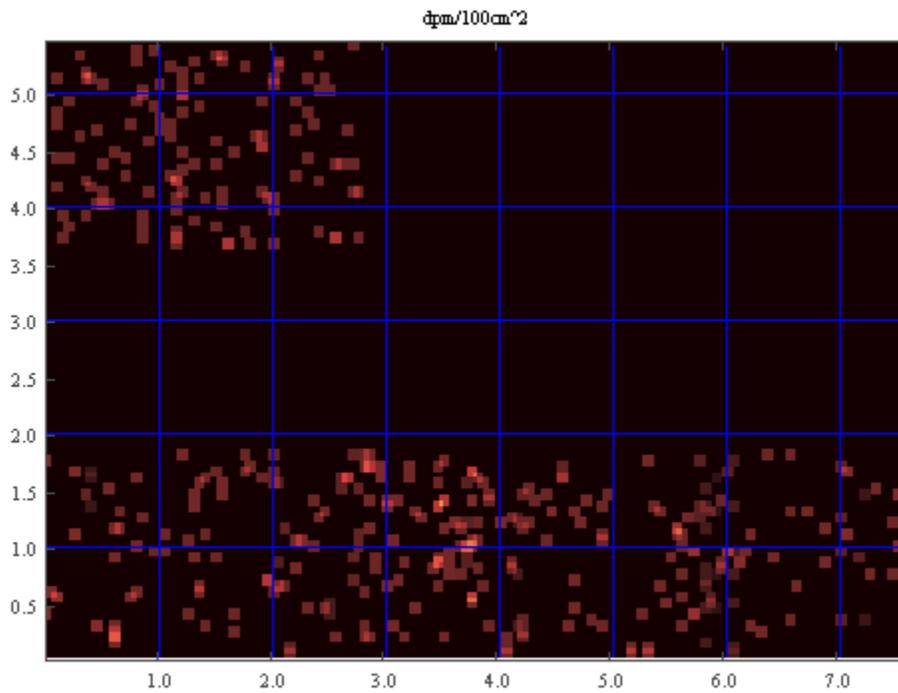


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

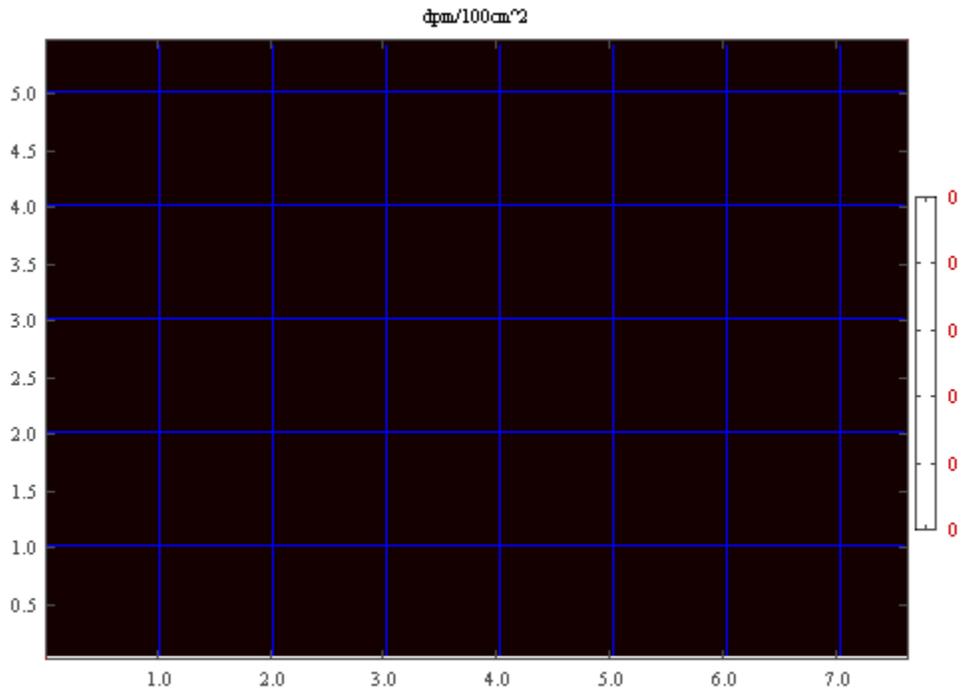


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0611A
Survey Date:	November 22, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

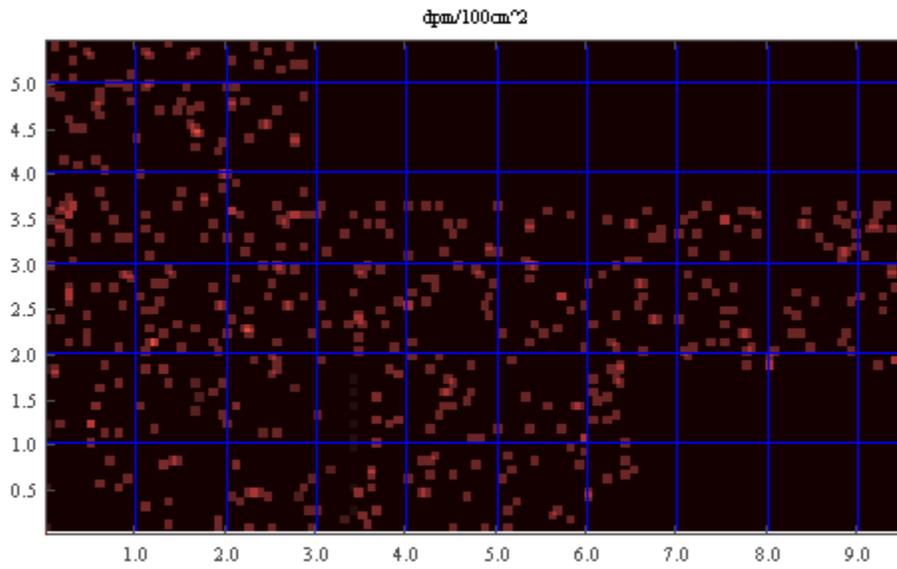


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

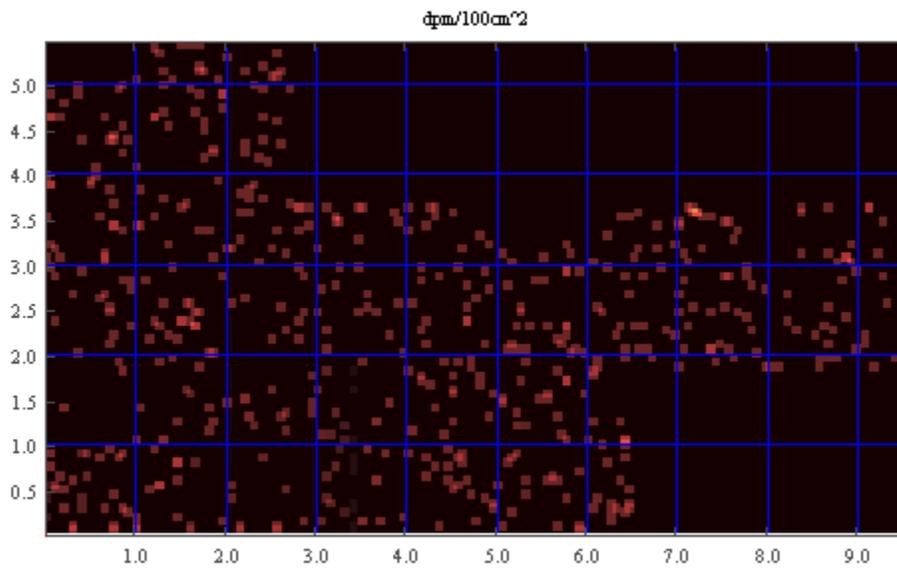


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

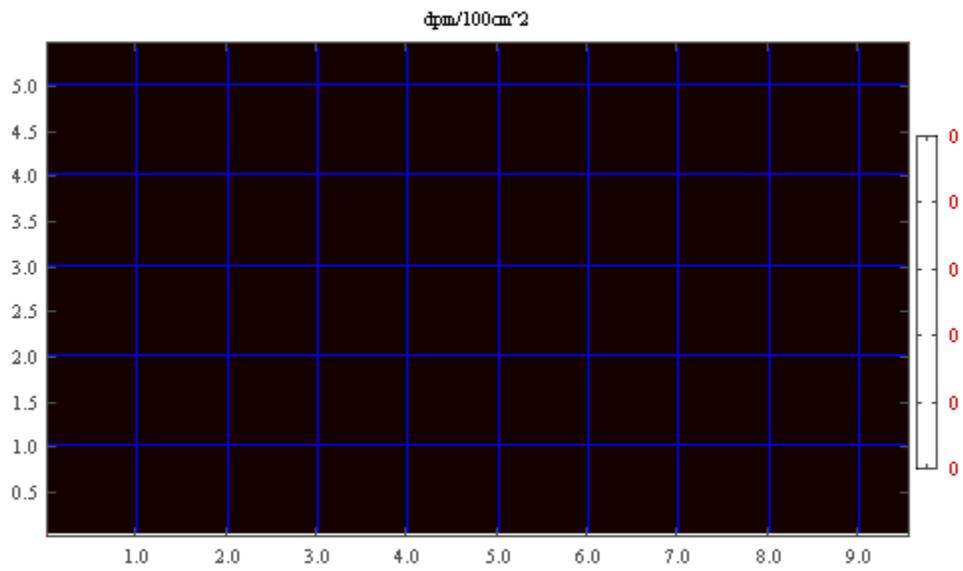


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0621A
Survey Date:	November 22, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

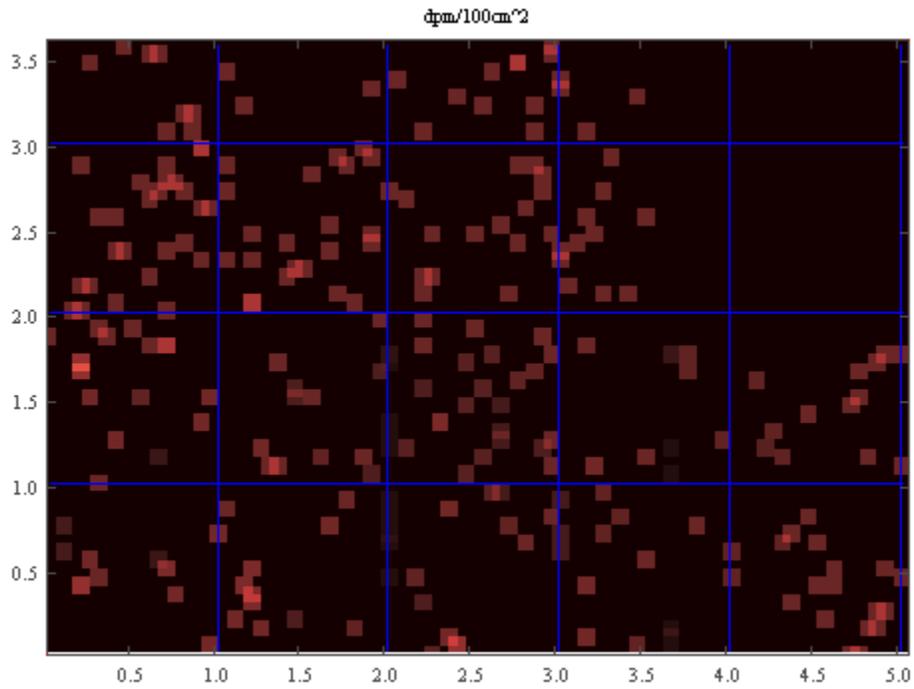


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

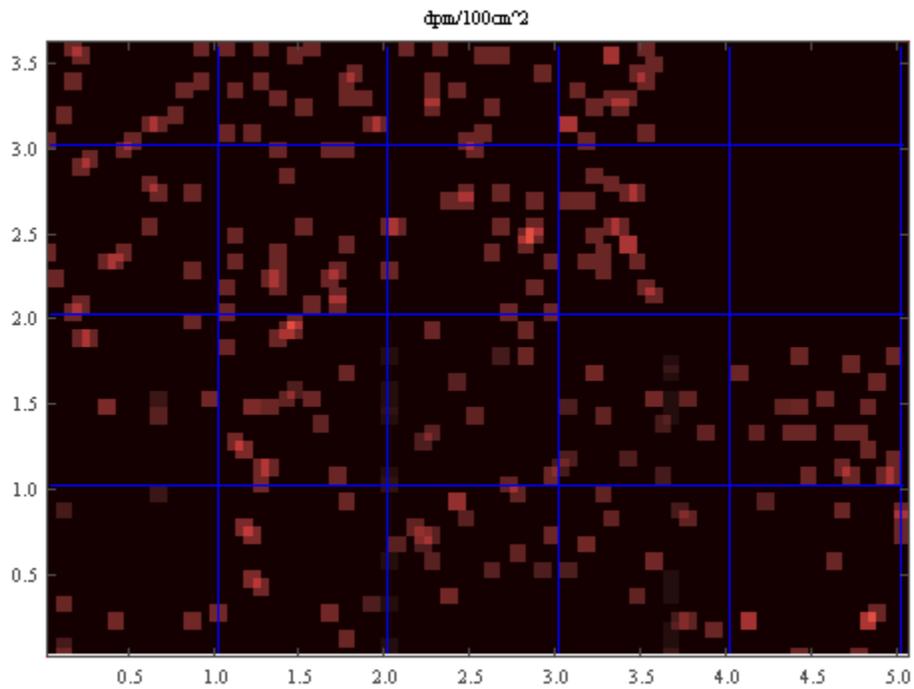


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

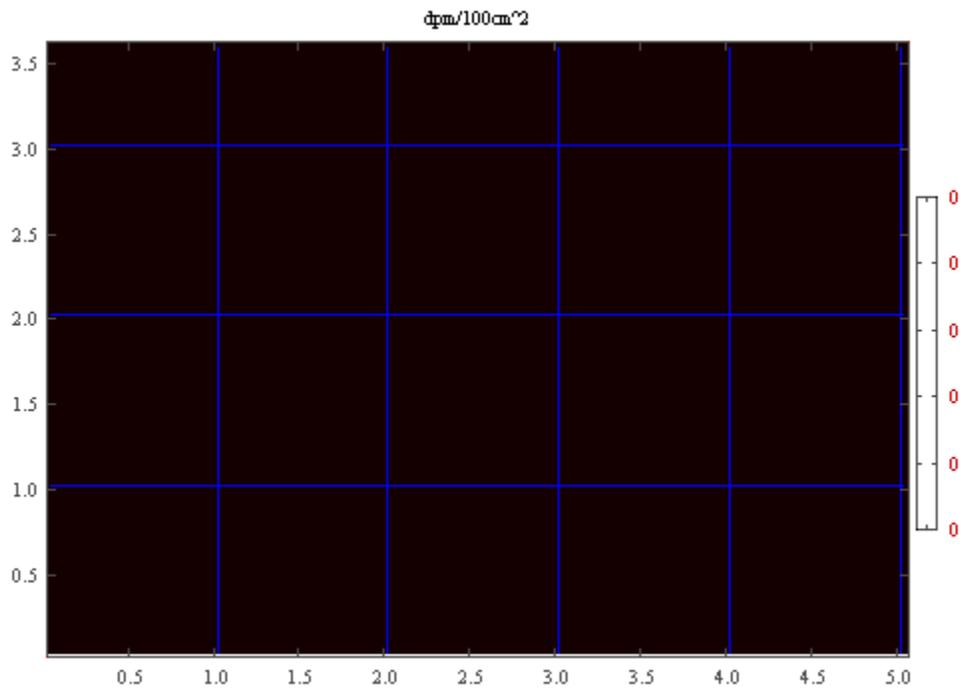


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0631A
Survey Date:	November 19, 2010
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

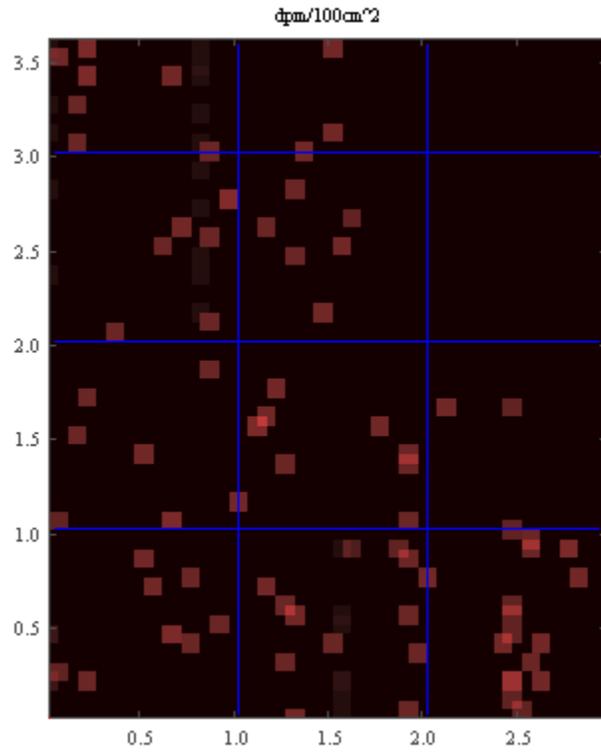


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

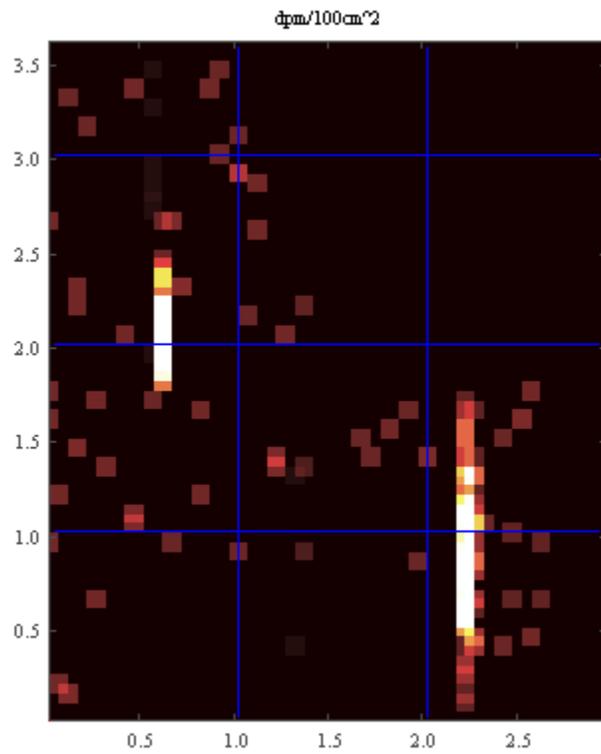


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

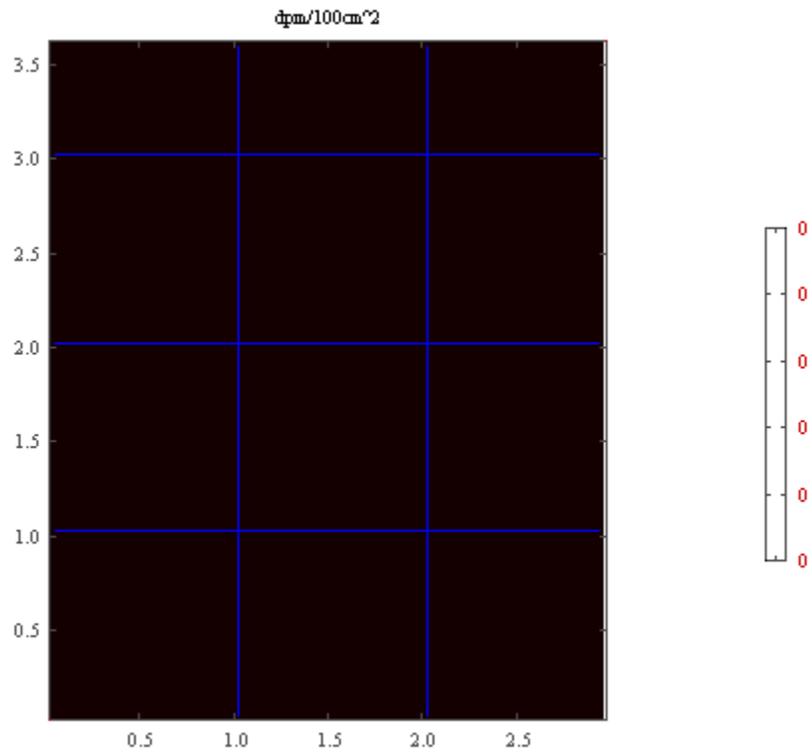


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0701A
Survey Date:	November 22, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

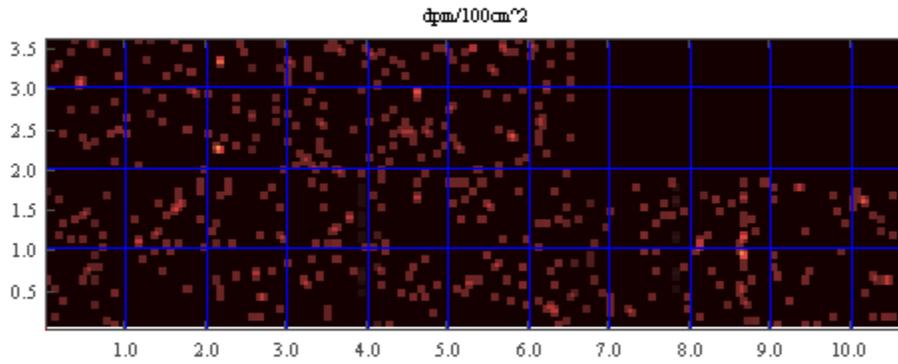


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

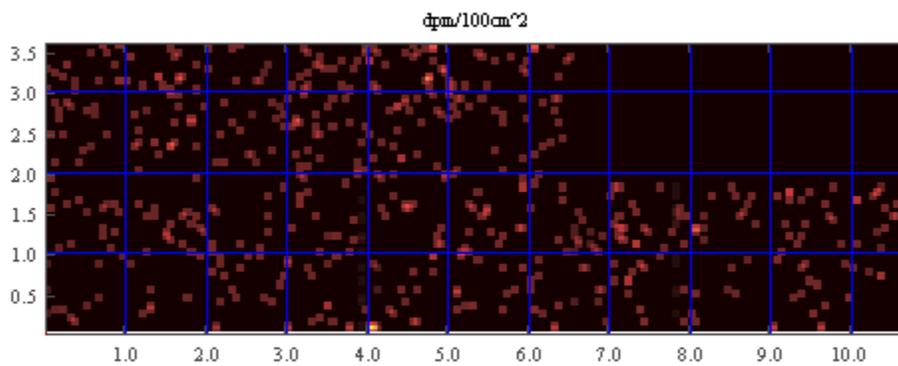


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

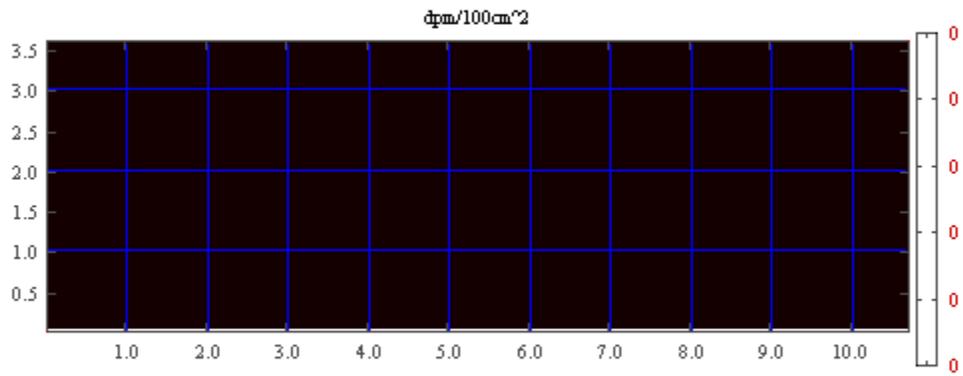


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0711A
Survey Date:	November 22, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

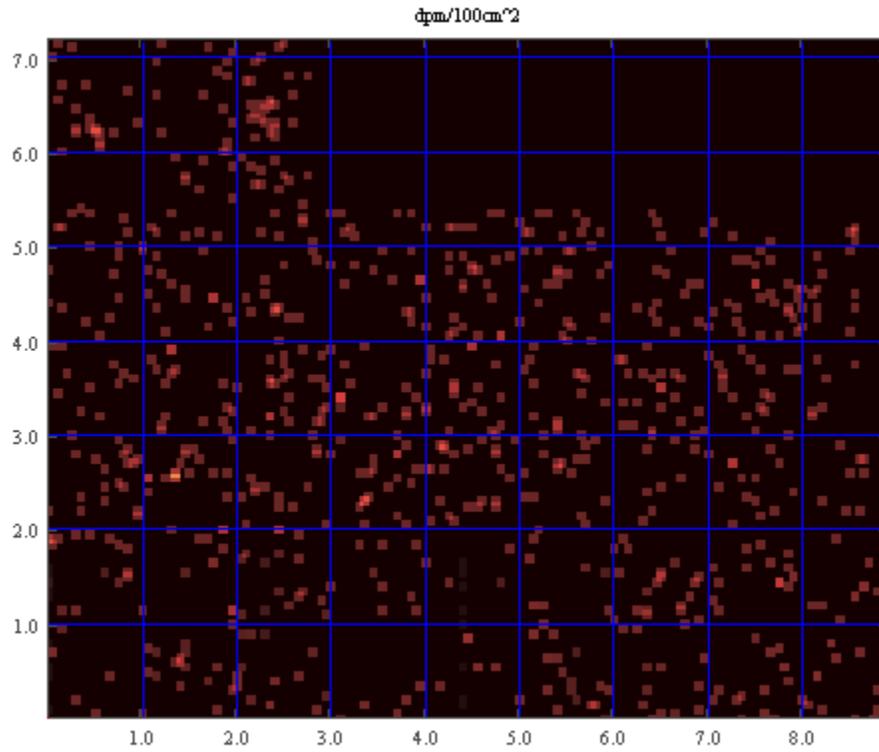


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

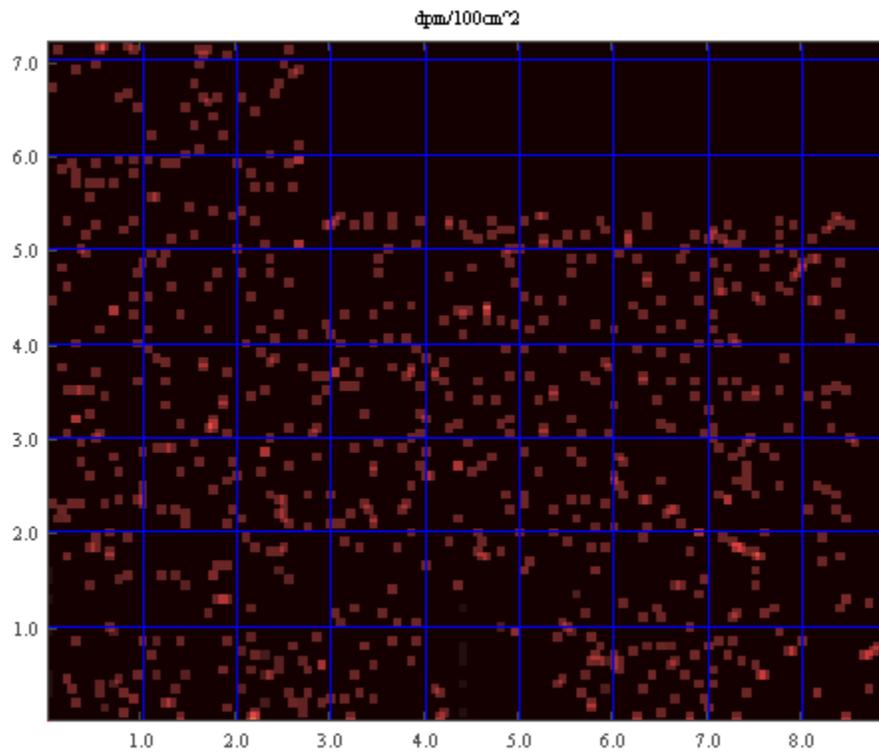


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

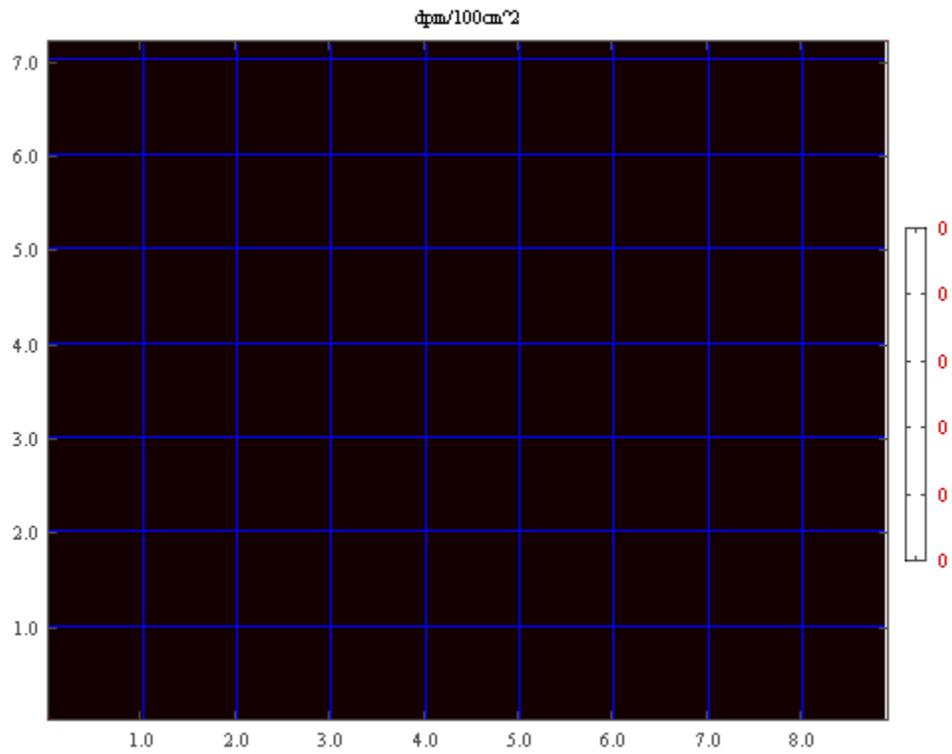


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0721A
Survey Date:	November 22, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

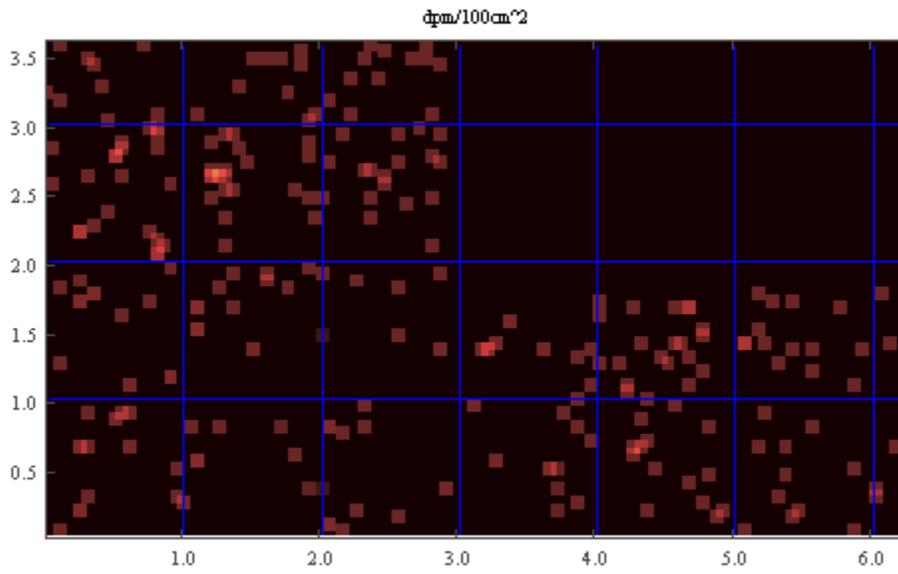


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

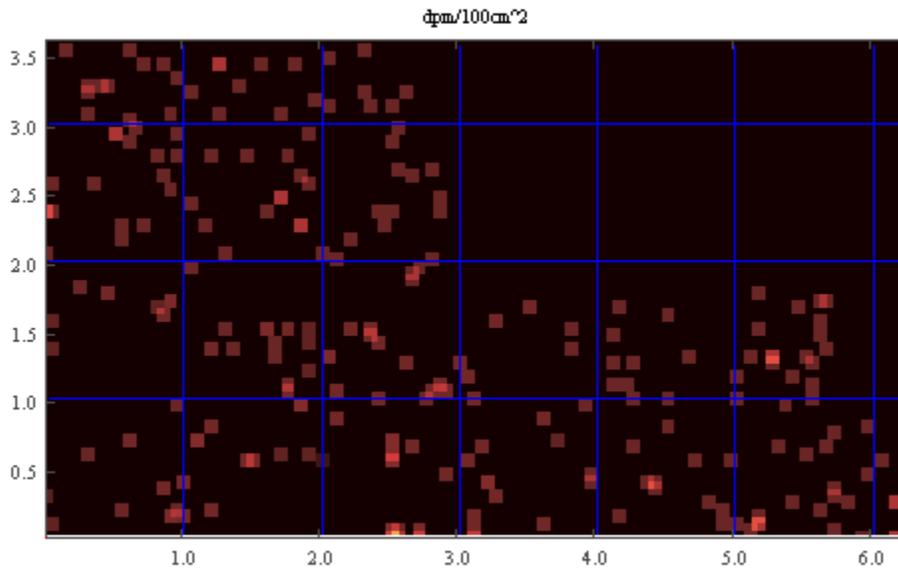


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

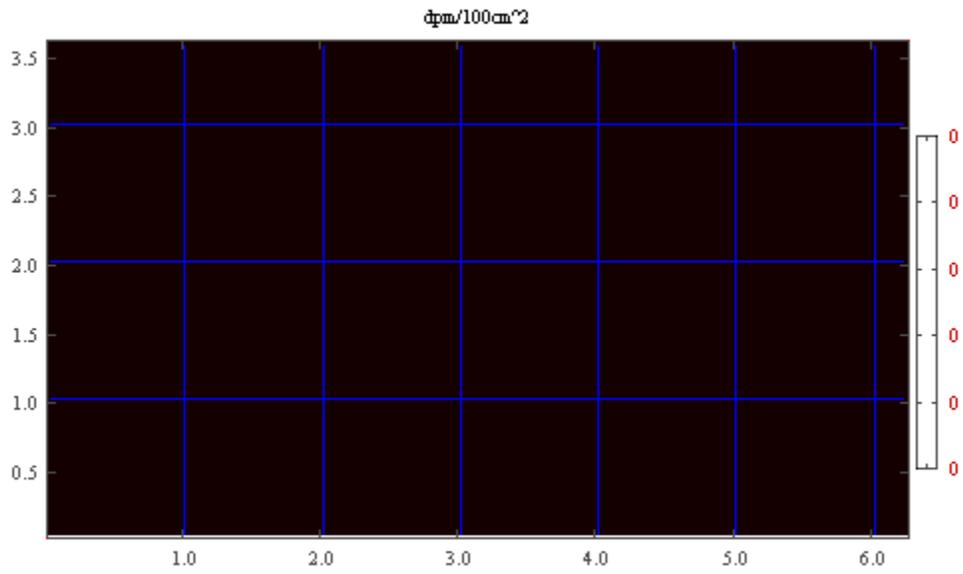


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0731A
Survey Date:	November 19, 2010
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

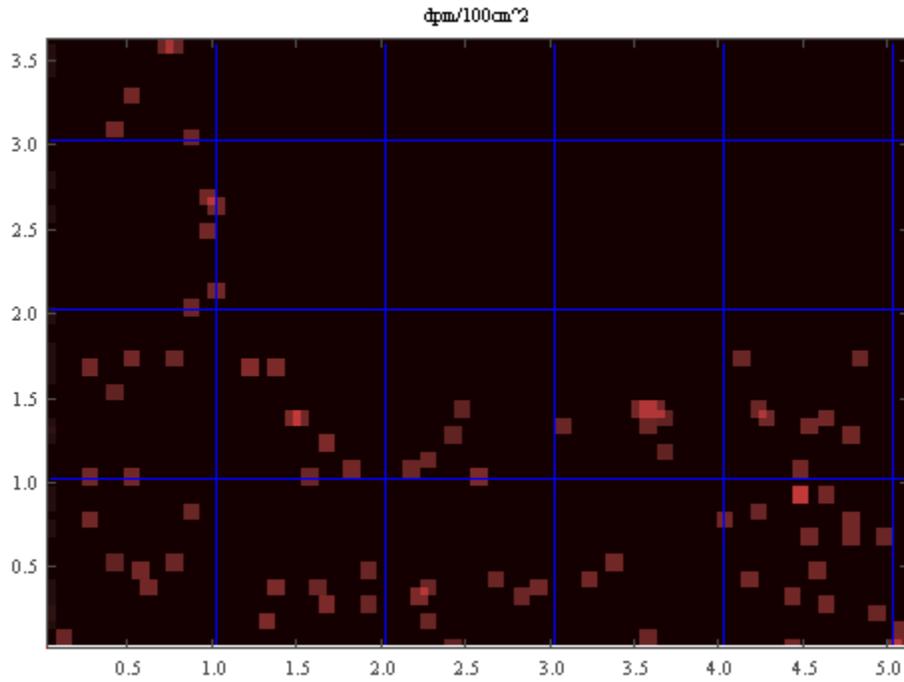


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

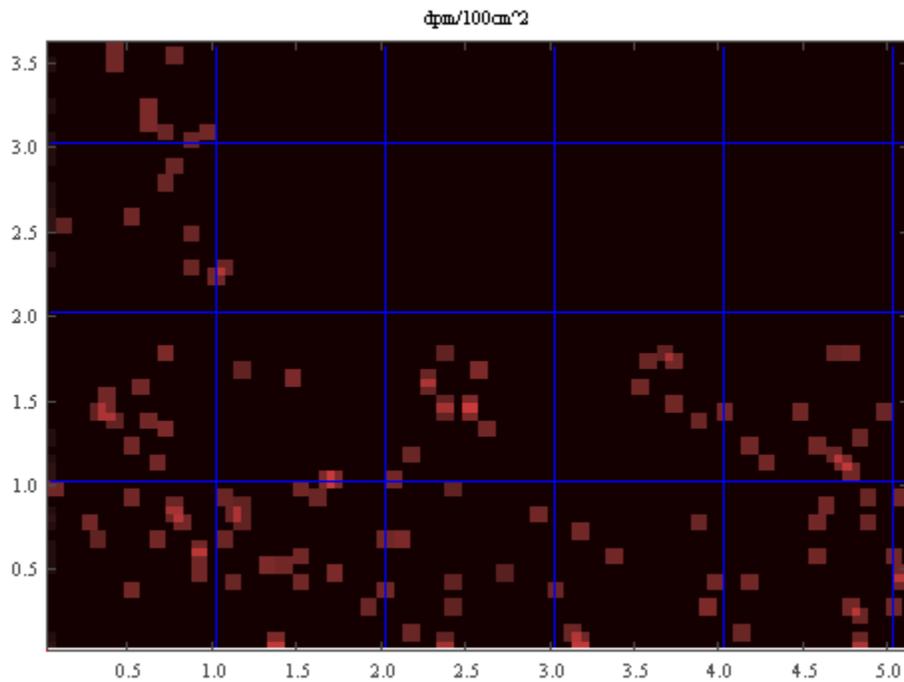


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

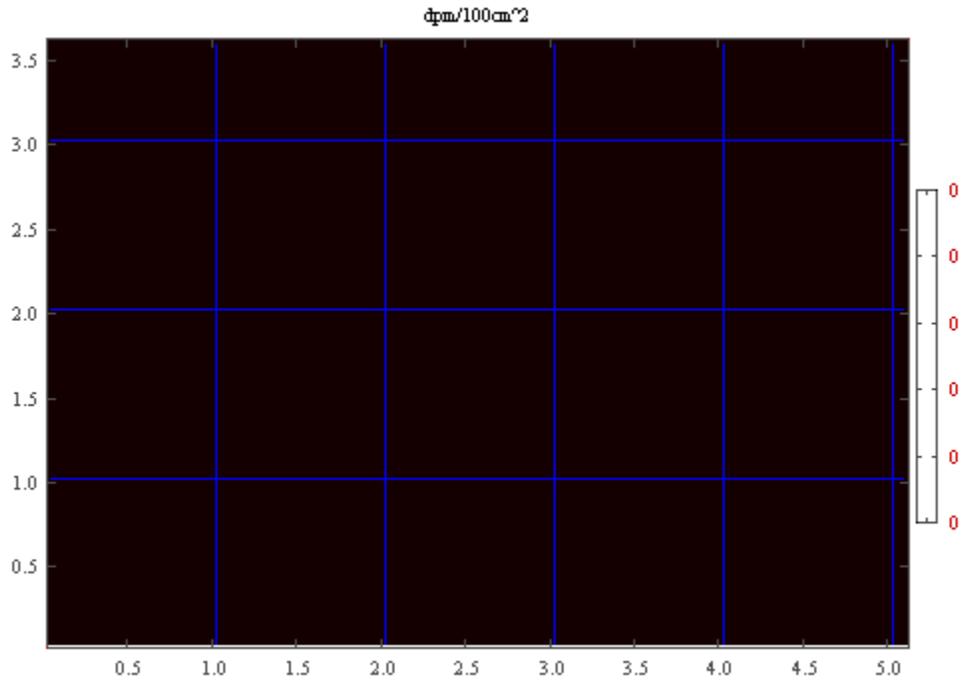


Figure 3: Meter Grid overlaid onto image plot of 100cm^2 areas. The color scale is in dpm per 100cm^2 .

Survey Report

Survey File Name:	FA0801A
Survey Date:	December 6, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	517 dpm/100 cm²
Area Exceeding 100 cm² Levels:	4.64 m ²

This survey is not position correlated.

Primary Detector:

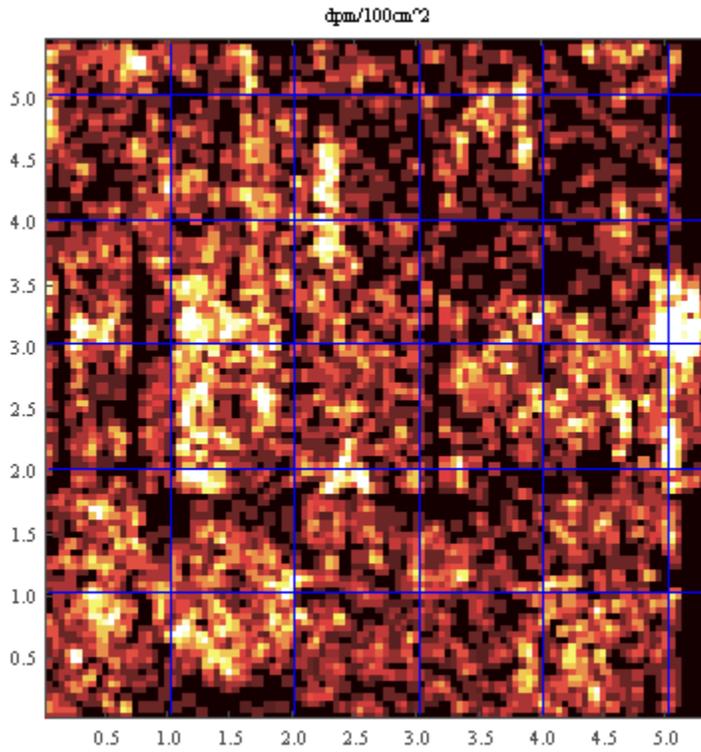


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

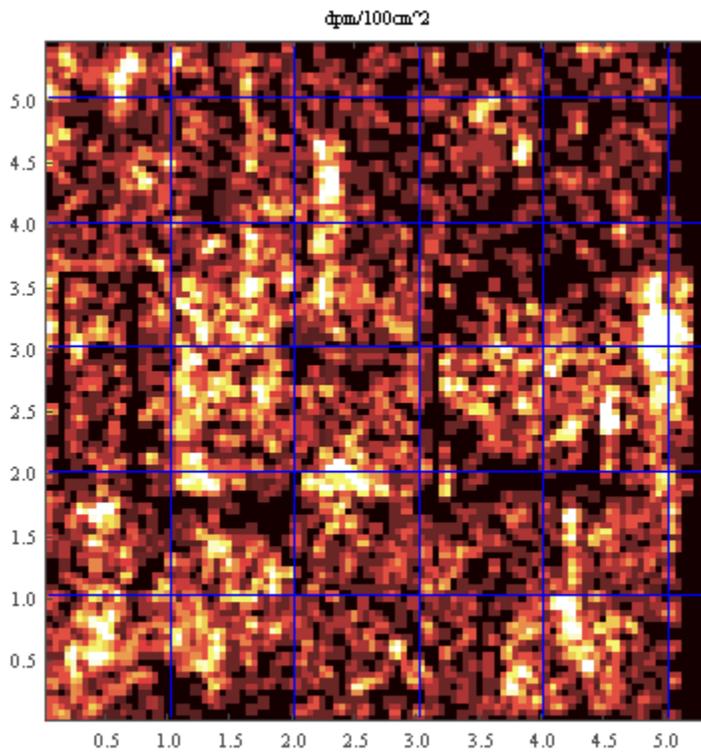


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

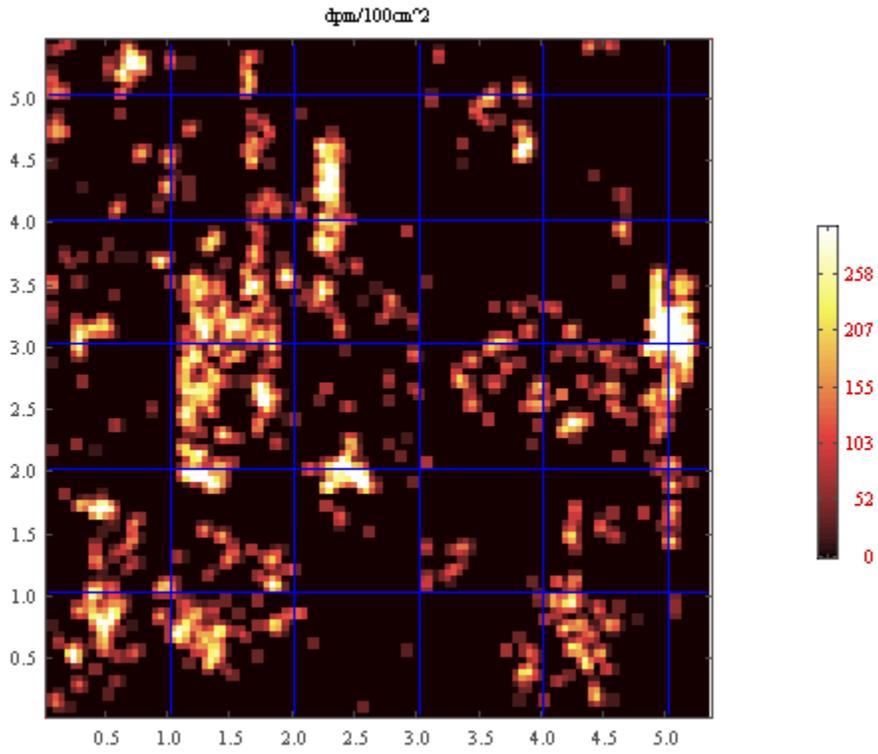


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

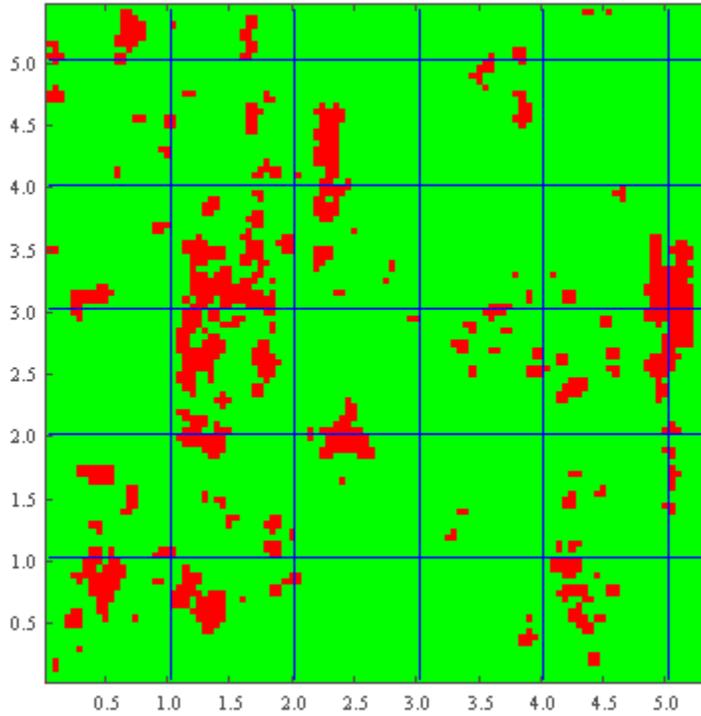


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	517	201	(505,315)	(0,125)	N/A		
Spot	488	201	(510,300)	(5,110)	N/A		
Spot	450	10	(45,170)	(0,160)	N/A		
Spot	448	152	(255,195)	(0,5)	N/A		
Spot	434	220	(75,530)	(0,160)	N/A		
Spot	429	197	(490,300)	(5,110)	N/A		
Spot	391	126	(125,200)	(0,10)	N/A		
Spot	390	136	(175,260)	(0,70)	N/A		
Spot	390	201	(510,330)	(5,140)	N/A		
Spot	371	6	(25,55)	(0,45)	N/A		
Spot	371	250	(225,425)	(0,55)	N/A		
Spot	358	148	(240,205)	(5,15)	N/A		
Spot	351	282	(385,455)	(0,85)	N/A		
Spot	351	250	(225,460)	(0,90)	N/A		
Spot	351	146	(230,190)	(5,0)	N/A		
Spot	344	12	(55,85)	(0,75)	N/A		
Spot	343	22	(110,70)	(5,60)	N/A		
Spot	342	201	(505,265)	(0,75)	N/A		
Spot	332	199	(495,330)	(0,140)	N/A		
Spot	332	134	(170,350)	(5,160)	N/A		
Spot	332	250	(230,440)	(5,70)	N/A		
Spot	329	38	(185,110)	(0,100)	N/A		
Spot	328	126	(130,315)	(5,125)	N/A		
Spot	312	250	(225,380)	(0,10)	N/A		
Spot	299	185	(425,240)	(0,50)	N/A		
Spot	298	140	(195,355)	(0,165)	N/A		
Spot	293	146	(225,345)	(0,155)	N/A		
Spot	293	132	(155,315)	(0,125)	N/A		
Spot	293	197	(490,315)	(5,125)	N/A		
Spot	293	203	(520,315)	(5,125)	N/A		
Spot	288	126	(125,215)	(0,25)	N/A		
Spot	277	128	(140,190)	(5,0)	N/A		
Spot	273	224	(95,370)	(0,0)	N/A		
Spot	273	199	(495,345)	(0,155)	N/A		
Spot	273	124	(115,245)	(0,55)	N/A		
Spot	273	86	(425,95)	(0,85)	N/A		

Spot	272	107	(30,310)	(5,120)	N/A		
Spot	269	8	(40,100)	(5,90)	N/A		
Spot	269	124	(120,290)	(5,100)	N/A		
Spot	265	10	(50,70)	(5,60)	N/A		
Spot	259	126	(125,345)	(0,155)	N/A		
Spot	259	126	(125,265)	(0,75)	N/A		
Spot	257	130	(145,230)	(0,40)	N/A		
Spot	254	28	(135,50)	(0,40)	N/A		
Spot	254	28	(140,70)	(5,60)	N/A		
Spot	254	88	(435,50)	(0,40)	N/A		
Spot	254	203	(515,285)	(0,95)	N/A		
Spot	248	130	(145,330)	(0,140)	N/A		
Spot	244	218	(65,515)	(0,145)	N/A		
Spot	240	8	(40,85)	(5,75)	N/A		
Spot	234	276	(360,500)	(5,130)	N/A		
Spot	234	232	(135,385)	(0,15)	N/A		
Spot	234	250	(225,405)	(0,35)	N/A		
Spot	234	84	(420,75)	(5,65)	N/A		
Spot	232	78	(390,40)	(5,30)	N/A		
Spot	221	38	(185,80)	(0,70)	N/A		
Spot	220	111	(50,315)	(5,125)	N/A		
Spot	215	138	(185,300)	(0,110)	N/A		
Spot	215	128	(140,275)	(5,85)	N/A		
Spot	215	282	(385,505)	(0,135)	N/A		
Spot	215	199	(495,360)	(0,170)	N/A		
Spot	215	86	(425,150)	(0,140)	N/A		
Spot	215	238	(165,515)	(0,145)	N/A		
Spot	215	173	(370,305)	(5,115)	N/A		
Spot	215	197	(490,260)	(5,70)	N/A		
Spot	215	102	(505,145)	(0,135)	N/A		
Spot	215	201	(510,345)	(5,155)	N/A		
Spot	213	298	(465,395)	(0,25)	N/A		
Spot	212	167	(335,275)	(0,85)	N/A		
Spot	210	238	(170,450)	(5,80)	N/A		
Spot	207	201	(505,190)	(0,0)	N/A		
Spot	206	179	(400,270)	(5,80)	N/A		
Spot	206	238	(170,375)	(5,5)	N/A		
Spot	204	128	(140,300)	(5,110)	N/A		

Spot	201	38	(185,130)	(0,120)	N/A		
Spot	200	90	(445,20)	(0,10)	N/A		
Spot	197	24	(120,85)	(5,75)	N/A		
Spot	195	132	(155,295)	(0,105)	N/A		
Spot	195	20	(95,105)	(0,95)	N/A		
Spot	195	102	(505,170)	(0,160)	N/A		
Spot	194	128	(135,250)	(0,60)	N/A		
Spot	194	224	(100,430)	(5,60)	N/A		
Spot	192	6	(30,175)	(5,165)	N/A		
Spot	191	126	(125,330)	(0,140)	N/A		
Spot	191	201	(505,205)	(0,15)	N/A		
Spot	186	150	(245,225)	(0,35)	N/A		
Spot	185	191	(455,270)	(0,80)	N/A		
Spot	182	179	(400,255)	(5,65)	N/A		
Spot	180	128	(140,205)	(5,15)	N/A		
Spot	176	220	(80,455)	(5,85)	N/A		
Spot	176	30	(145,150)	(0,140)	N/A		
Spot	176	282	(385,475)	(0,105)	N/A		
Spot	176	199	(495,235)	(0,45)	N/A		
Spot	176	206	(10,475)	(5,105)	N/A		
Spot	176	20	(95,85)	(0,75)	N/A		
Spot	176	238	(165,530)	(0,160)	N/A		
Spot	176	134	(170,305)	(5,115)	N/A		
Spot	176	136	(175,330)	(0,140)	N/A		
Spot	176	82	(410,95)	(5,85)	N/A		
Spot	175	107	(30,295)	(5,105)	N/A		
Spot	174	90	(450,55)	(5,45)	N/A		
Spot	173	92	(455,80)	(0,70)	N/A		
Spot	171	224	(100,450)	(5,80)	N/A		
Spot	171	238	(170,465)	(5,95)	N/A		
Spot	171	26	(125,70)	(0,60)	N/A		
Spot	167	216	(60,410)	(5,40)	N/A		
Spot	163	185	(425,315)	(0,125)	N/A		
Spot	162	16	(75,160)	(0,150)	N/A		
Spot	162	169	(345,290)	(0,100)	N/A		
Spot	158	169	(345,255)	(0,65)	N/A		
Spot	156	30	(150,130)	(5,120)	N/A		
Spot	156	206	(10,505)	(5,135)	N/A		

Spot	156	122	(110,220)	(5,30)	N/A		
Spot	156	156	(280,340)	(5,150)	N/A		
Spot	156	26	(130,155)	(5,145)	N/A		
Spot	156	136	(175,240)	(0,50)	N/A		
Spot	156	191	(460,250)	(5,60)	N/A		
Spot	156	128	(140,345)	(5,155)	N/A		
Spot	155	292	(440,540)	(5,170)	N/A		
Spot	152	10	(45,130)	(0,120)	N/A		
Spot	151	148	(240,315)	(5,125)	N/A		
Spot	151	138	(185,315)	(0,125)	N/A		
Spot	150	189	(450,295)	(5,105)	N/A		
Spot	147	14	(70,145)	(5,135)	N/A		
Spot	147	252	(240,400)	(5,30)	N/A		
Spot	142	88	(440,70)	(5,60)	N/A		
Spot	137	86	(425,110)	(0,100)	N/A		
Spot	137	104	(5,350)	(0,160)	N/A		
Spot	137	2	(10,15)	(5,5)	N/A		
Spot	137	122	(110,270)	(5,80)	N/A		
Spot	137	228	(120,475)	(5,105)	N/A		
Spot	137	136	(175,275)	(0,85)	N/A		
Spot	137	240	(175,415)	(0,45)	N/A		
Spot	137	246	(205,410)	(0,40)	N/A		
Spot	137	252	(240,460)	(5,90)	N/A		
Spot	137	68	(335,140)	(0,130)	N/A		
Spot	137	183	(415,260)	(0,70)	N/A		
Spot	135	177	(390,315)	(5,125)	N/A		
Spot	135	90	(450,155)	(5,145)	N/A		
Spot	133	78	(390,55)	(5,45)	N/A		
Spot	132	242	(190,410)	(5,40)	N/A		
Spot	132	160	(300,295)	(5,105)	N/A		
Spot	132	12	(55,105)	(0,95)	N/A		
Spot	132	138	(190,260)	(5,70)	N/A		
Spot	128	238	(170,395)	(5,25)	N/A		
Spot	128	40	(200,85)	(5,75)	N/A		
Spot	128	6	(30,30)	(5,20)	N/A		
Spot	123	16	(75,55)	(0,45)	N/A		
Spot	123	10	(50,55)	(5,45)	N/A		
Spot	117	86	(425,170)	(0,160)	N/A		

Spot	117	6	(25,90)	(0,80)	N/A		
Spot	117	122	(110,200)	(5,10)	N/A		
Spot	117	124	(115,310)	(0,120)	N/A		
Spot	117	40	(200,120)	(5,110)	N/A		
Spot	117	146	(225,205)	(0,15)	N/A		
Spot	117	48	(240,165)	(5,155)	N/A		
Spot	117	156	(275,325)	(0,135)	N/A		
Spot	117	66	(330,120)	(5,110)	N/A		
Spot	117	274	(345,490)	(0,120)	N/A		
Spot	117	173	(370,285)	(5,95)	N/A		
Spot	117	181	(410,330)	(5,140)	N/A		
Spot	117	296	(455,540)	(0,170)	N/A		
Spot	117	171	(360,270)	(5,80)	N/A		
Spot	117	150	(250,365)	(5,175)	N/A		
Spot	117	175	(380,330)	(5,140)	N/A		
Spot	114	226	(105,530)	(0,160)	N/A		
Spot	111	242	(185,470)	(0,100)	N/A		
Spot	111	199	(500,280)	(5,90)	N/A		
Spot	109	32	(160,70)	(5,60)	N/A		
Spot	103	126	(125,360)	(0,170)	N/A		
Spot	100	216	(60,500)	(5,130)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0811A
Survey Date:	December 1, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	1,268 dpm/100 cm²
Area Exceeding 100 cm² Levels:	4.64 m ²

This survey is not position correlated.

Primary Detector:

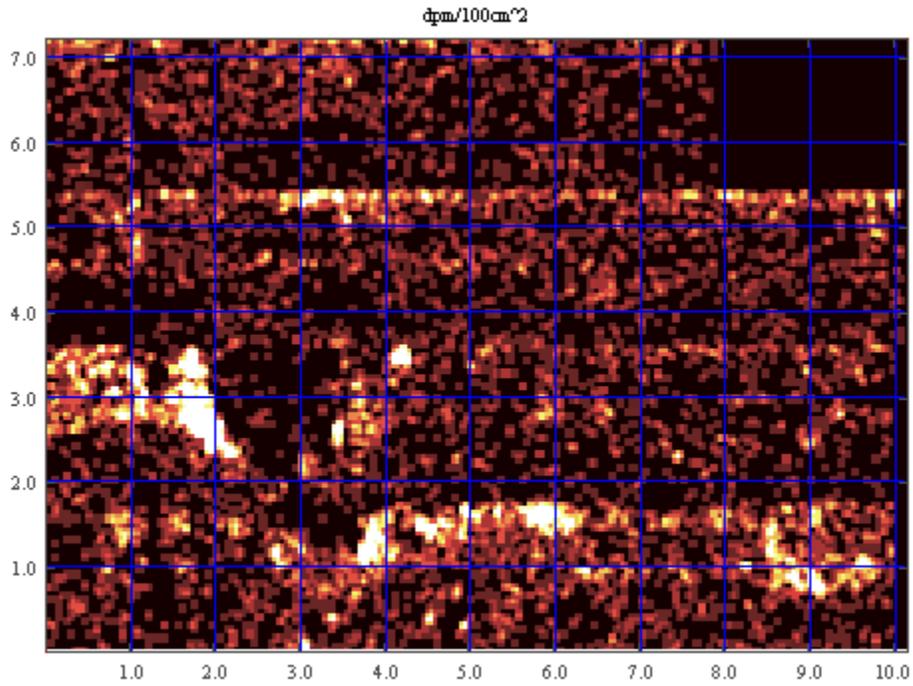


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

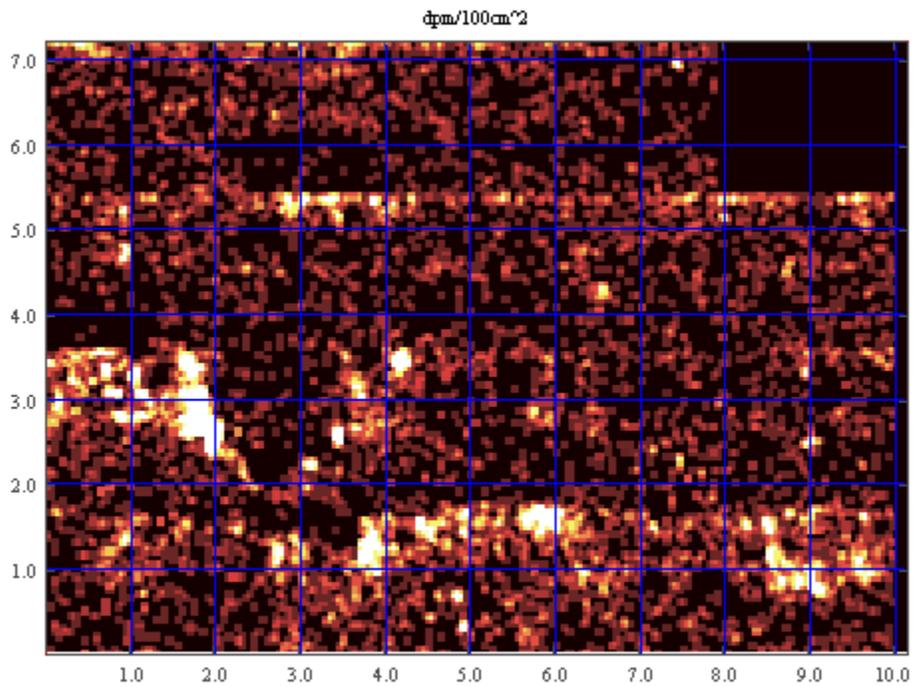


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

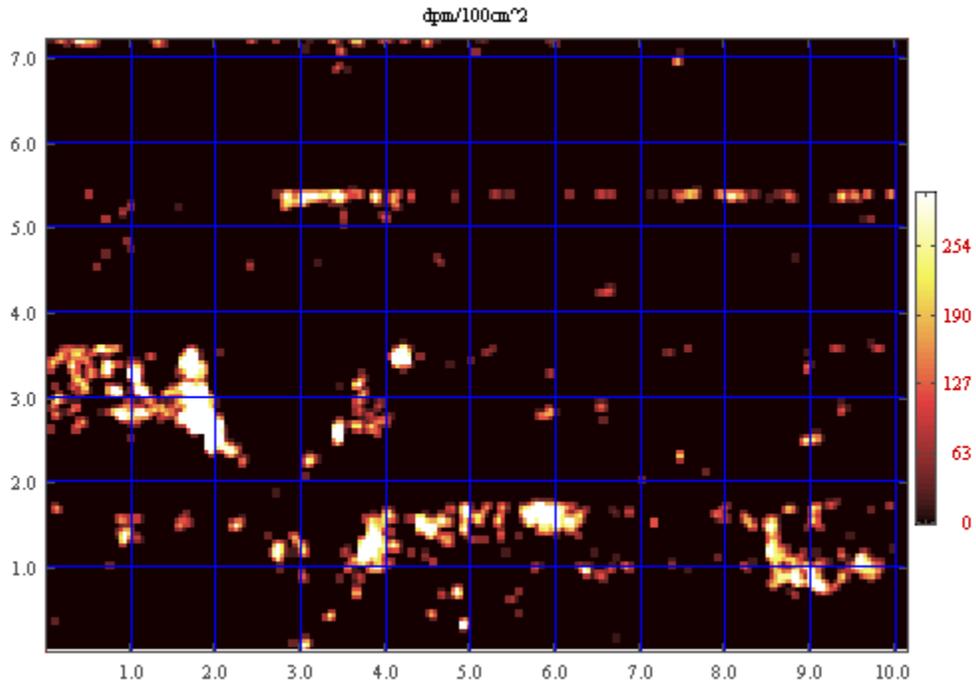


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

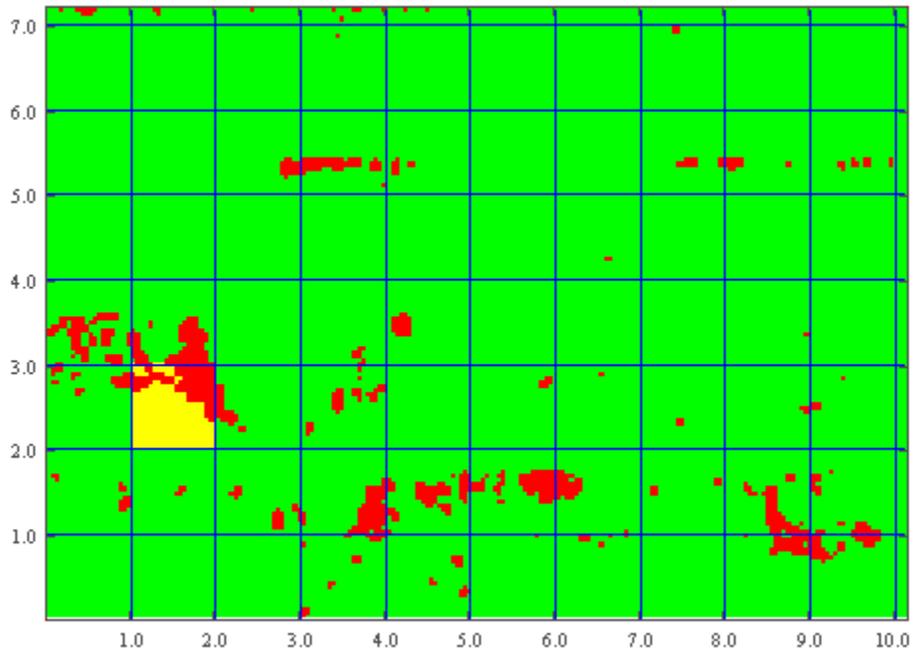


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	1268	236	(175,335)	(0,150)	N/A		
Spot	1053	238	(185,280)	(0,95)	N/A		
Spot	917	284	(415,345)	(0,160)	N/A		
Spot	917	270	(345,260)	(0,75)	N/A		
Spot	858	240	(195,250)	(0,65)	N/A		
Spot	839	118	(585,165)	(0,160)	N/A		
Spot	819	236	(180,265)	(5,80)	N/A		
Spot	818	240	(200,265)	(5,80)	N/A		
Spot	761	234	(170,280)	(5,95)	N/A		
Spot	741	236	(175,350)	(0,165)	N/A		
Spot	722	222	(105,325)	(0,140)	N/A		
Spot	722	76	(375,115)	(0,110)	N/A		
Spot	722	78	(385,130)	(0,125)	N/A		
Spot	702	224	(115,305)	(0,120)	N/A		
Spot	644	238	(185,305)	(0,120)	N/A		
Spot	605	218	(85,305)	(0,120)	N/A		
Spot	566	182	(905,85)	(0,80)	N/A		
Spot	546	234	(170,310)	(5,125)	N/A		
Spot	546	114	(570,160)	(5,155)	N/A		
Spot	535	90	(445,150)	(0,145)	N/A		
Spot	515	218	(90,280)	(5,95)	N/A		
Spot	507	120	(600,165)	(5,160)	N/A		
Spot	488	100	(495,165)	(0,160)	N/A		
Spot	488	100	(495,35)	(0,30)	N/A		
Spot	445	172	(855,120)	(0,115)	N/A		
Spot	442	469	(345,535)	(0,170)	N/A		
Spot	437	178	(885,85)	(0,80)	N/A		
Spot	429	234	(170,295)	(5,110)	N/A		
Spot	410	286	(430,345)	(5,160)	N/A		
Spot	410	78	(385,145)	(0,140)	N/A		
Spot	409	240	(200,280)	(5,95)	N/A		
Spot	404	216	(75,335)	(0,150)	N/A		
Spot	390	224	(115,280)	(0,95)	N/A		
Spot	390	192	(960,110)	(5,105)	N/A		
Spot	384	98	(485,70)	(0,65)	N/A		
Spot	372	56	(275,120)	(0,115)	N/A		

Spot	371	477	(390,535)	(5,170)	N/A		
Spot	368	172	(855,145)	(0,140)	N/A		
Spot	351	20	(95,135)	(0,130)	N/A		
Spot	351	461	(305,530)	(0,165)	N/A		
Spot	350	78	(390,115)	(5,110)	N/A		
Spot	347	128	(635,95)	(0,90)	N/A		
Spot	342	244	(220,235)	(5,50)	N/A		
Spot	332	120	(600,150)	(5,145)	N/A		
Spot	330	242	(210,250)	(5,65)	N/A		
Spot	312	463	(320,535)	(5,170)	N/A		
Spot	312	274	(370,315)	(5,130)	N/A		
Spot	312	232	(160,340)	(5,155)	N/A		
Spot	312	457	(285,535)	(0,170)	N/A		
Spot	312	100	(495,145)	(0,140)	N/A		
Spot	312	180	(900,100)	(5,95)	N/A		
Spot	312	124	(615,155)	(0,150)	N/A		
Spot	308	214	(70,355)	(5,170)	N/A		
Spot	306	62	(305,10)	(0,5)	N/A		
Spot	293	92	(460,145)	(5,140)	N/A		
Spot	292	240	(195,235)	(0,50)	N/A		
Spot	292	208	(35,335)	(0,150)	N/A		
Spot	291	80	(395,100)	(0,95)	N/A		
Spot	280	46	(225,150)	(0,145)	N/A		
Spot	273	608	(40,715)	(5,170)	N/A		
Spot	270	82	(410,125)	(5,120)	N/A		
Spot	266	561	(810,535)	(5,170)	N/A		
Spot	262	262	(310,225)	(5,40)	N/A		
Spot	254	380	(895,250)	(0,65)	N/A		
Spot	254	118	(585,150)	(0,145)	N/A		
Spot	254	204	(15,295)	(0,110)	N/A		
Spot	254	82	(405,160)	(0,155)	N/A		
Spot	251	286	(425,360)	(0,175)	N/A		
Spot	251	174	(870,90)	(5,85)	N/A		
Spot	246	210	(45,315)	(0,130)	N/A		
Spot	235	108	(535,155)	(0,150)	N/A		
Spot	234	274	(370,265)	(5,80)	N/A		
Spot	234	68	(335,45)	(0,40)	N/A		
Spot	234	102	(510,160)	(5,155)	N/A		

Spot	234	182	(905,170)	(0,165)	N/A		
Spot	234	194	(965,95)	(0,90)	N/A		
Spot	231	126	(630,160)	(5,155)	N/A		
Spot	230	172	(860,105)	(5,100)	N/A		
Spot	230	587	(940,535)	(5,170)	N/A		
Spot	228	62	(305,120)	(0,115)	N/A		
Spot	226	208	(40,350)	(5,165)	N/A		
Spot	215	202	(10,340)	(5,155)	N/A		
Spot	215	230	(145,305)	(0,120)	N/A		
Spot	215	74	(370,130)	(5,125)	N/A		
Spot	215	278	(385,265)	(0,80)	N/A		
Spot	215	182	(905,155)	(0,150)	N/A		
Spot	215	188	(940,90)	(5,85)	N/A		
Spot	213	176	(880,110)	(5,105)	N/A		
Spot	211	226	(130,285)	(5,100)	N/A		
Spot	205	674	(370,715)	(5,170)	N/A		
Spot	195	230	(145,280)	(0,95)	N/A		
Spot	195	690	(450,715)	(5,170)	N/A		
Spot	195	350	(745,230)	(0,45)	N/A		
Spot	195	551	(760,535)	(5,170)	N/A		
Spot	195	276	(375,300)	(0,115)	N/A		
Spot	193	166	(830,150)	(5,145)	N/A		
Spot	192	612	(55,715)	(0,170)	N/A		
Spot	191	176	(875,170)	(0,165)	N/A		
Spot	190	481	(410,530)	(5,165)	N/A		
Spot	184	628	(135,715)	(0,170)	N/A		
Spot	176	318	(590,280)	(5,95)	N/A		
Spot	176	60	(295,135)	(0,130)	N/A		
Spot	176	270	(345,245)	(0,60)	N/A		
Spot	176	74	(365,70)	(0,65)	N/A		
Spot	176	92	(455,45)	(0,40)	N/A		
Spot	176	750	(745,690)	(0,145)	N/A		
Spot	175	124	(615,170)	(0,165)	N/A		
Spot	175	240	(200,295)	(5,110)	N/A		
Spot	175	184	(920,75)	(5,70)	N/A		
Spot	175	96	(475,130)	(0,125)	N/A		
Spot	175	172	(855,80)	(0,75)	N/A		
Spot	174	138	(685,100)	(0,95)	N/A		

Spot	173	96	(475,155)	(0,150)	N/A		
Spot	170	210	(45,270)	(0,85)	N/A		
Spot	170	212	(55,330)	(0,145)	N/A		
Spot	170	108	(540,170)	(5,165)	N/A		
Spot	164	4	(15,170)	(0,165)	N/A		
Spot	156	32	(160,150)	(5,145)	N/A		
Spot	156	591	(955,535)	(0,170)	N/A		
Spot	156	218	(85,355)	(0,170)	N/A		
Spot	156	204	(15,280)	(0,95)	N/A		
Spot	156	18	(90,155)	(5,150)	N/A		
Spot	156	238	(190,330)	(5,145)	N/A		
Spot	156	668	(340,715)	(5,170)	N/A		
Spot	156	72	(360,100)	(5,95)	N/A		
Spot	156	382	(910,250)	(5,65)	N/A		
Spot	156	196	(980,95)	(5,90)	N/A		
Spot	156	599	(995,535)	(0,170)	N/A		
Spot	153	604	(20,715)	(5,170)	N/A		
Spot	152	559	(795,535)	(0,170)	N/A		
Spot	137	280	(400,270)	(5,85)	N/A		
Spot	137	248	(235,225)	(0,40)	N/A		
Spot	137	457	(285,520)	(0,155)	N/A		
Spot	137	575	(875,535)	(0,170)	N/A		
Spot	137	380	(900,335)	(5,150)	N/A		
Spot	137	188	(940,115)	(5,110)	N/A		
Spot	137	593	(970,535)	(5,170)	N/A		
Spot	136	473	(370,535)	(5,170)	N/A		
Spot	136	208	(35,285)	(0,100)	N/A		
Spot	136	206	(25,355)	(0,170)	N/A		
Spot	135	158	(790,160)	(5,155)	N/A		
Spot	134	222	(105,340)	(0,155)	N/A		
Spot	128	332	(655,290)	(0,105)	N/A		
Spot	125	549	(745,535)	(0,170)	N/A		
Spot	124	62	(305,90)	(0,85)	N/A		
Spot	117	80	(400,145)	(5,140)	N/A		
Spot	117	670	(345,685)	(0,140)	N/A		
Spot	117	650	(245,715)	(0,170)	N/A		
Spot	117	274	(370,285)	(5,100)	N/A		
Spot	117	76	(380,100)	(5,95)	N/A		

Spot	117	96	(480,170)	(5,165)	N/A		
Spot	117	108	(535,140)	(0,135)	N/A		
Spot	117	116	(580,100)	(5,95)	N/A		
Spot	117	132	(655,90)	(0,85)	N/A		
Spot	117	144	(715,150)	(0,145)	N/A		
Spot	117	166	(825,100)	(0,95)	N/A		
Spot	117	388	(940,285)	(5,100)	N/A		
Spot	117	485	(430,535)	(5,170)	N/A		
Spot	116	184	(915,105)	(0,100)	N/A		
Spot	116	186	(925,175)	(0,170)	N/A		
Spot	116	686	(425,715)	(0,170)	N/A		
Spot	116	531	(660,425)	(5,60)	N/A		
Spot	115	680	(400,715)	(5,170)	N/A		
Spot	114	479	(400,510)	(5,145)	N/A		
Spot	114	212	(55,350)	(0,165)	N/A		
Spot	113	226	(125,345)	(0,160)	N/A		
Grid	132	N/A	N/A	N/A	(2,3)		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0821A
Survey Date:	December 3, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	1,014 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.23 m ²

This survey is not position correlated.

Primary Detector:

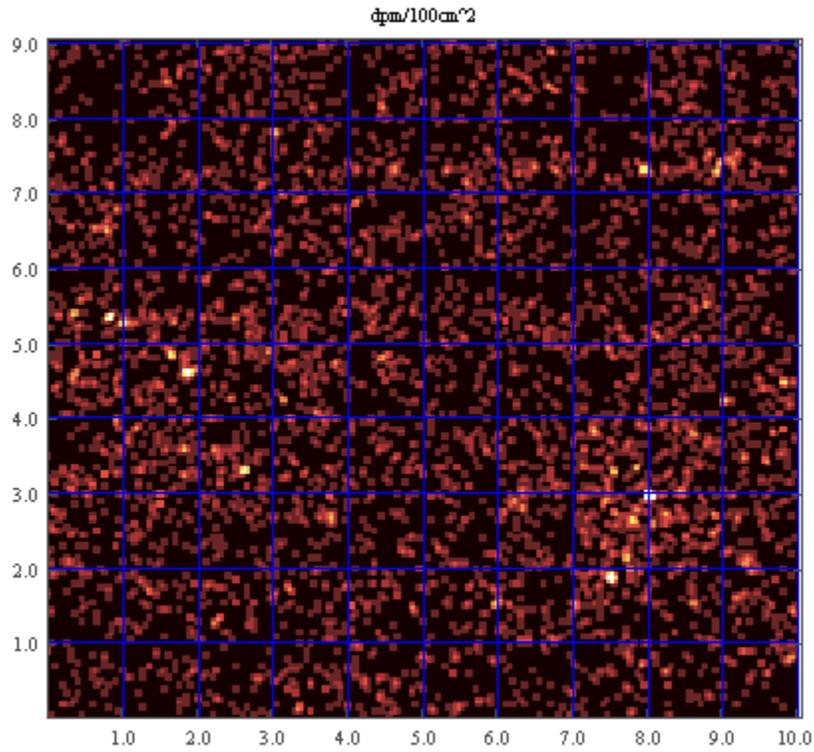


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

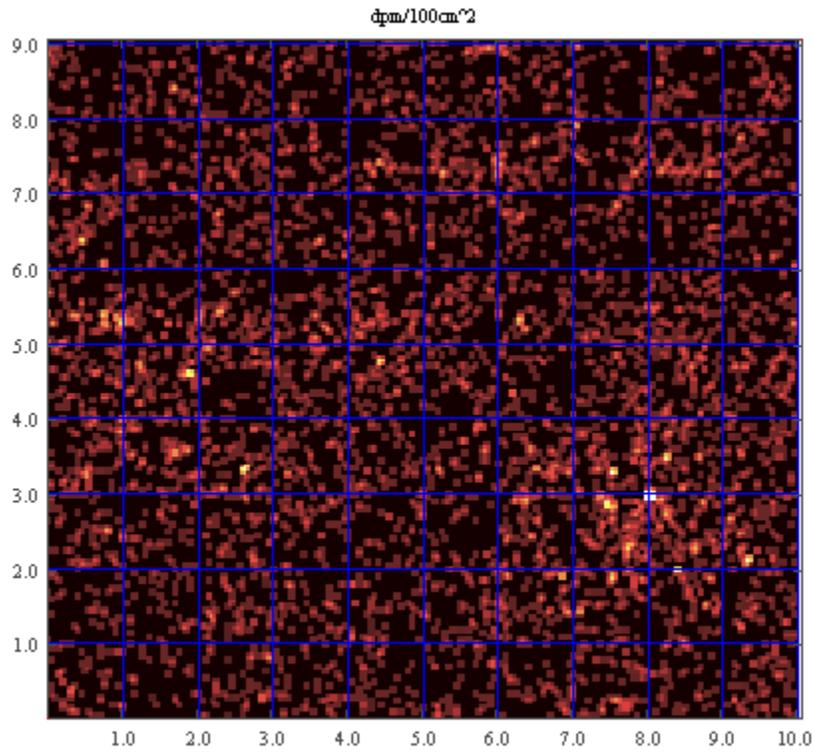


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

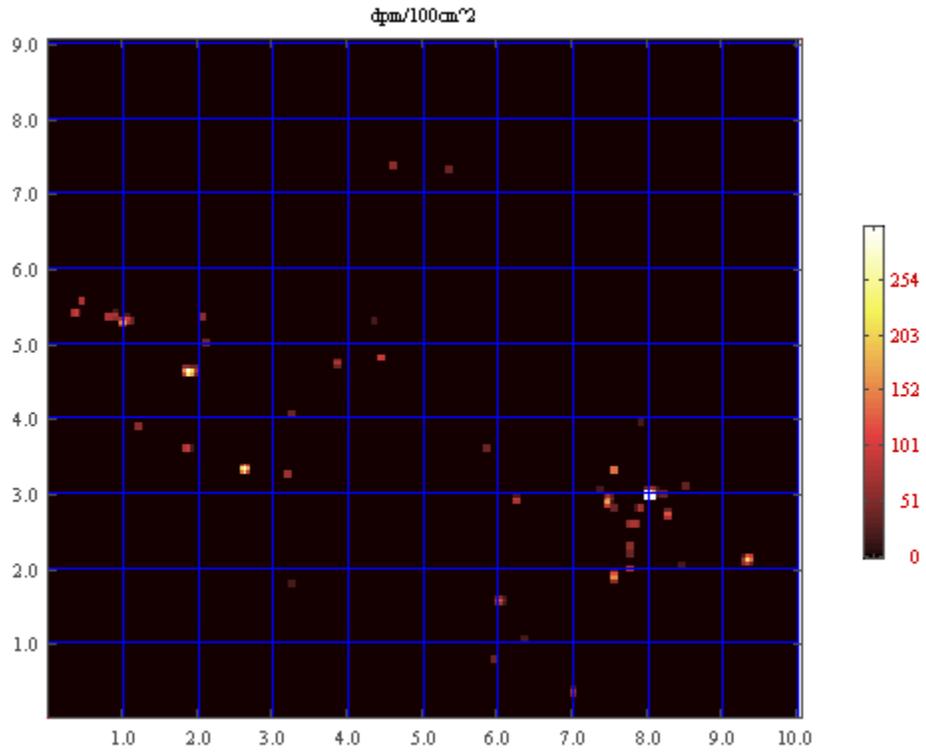


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

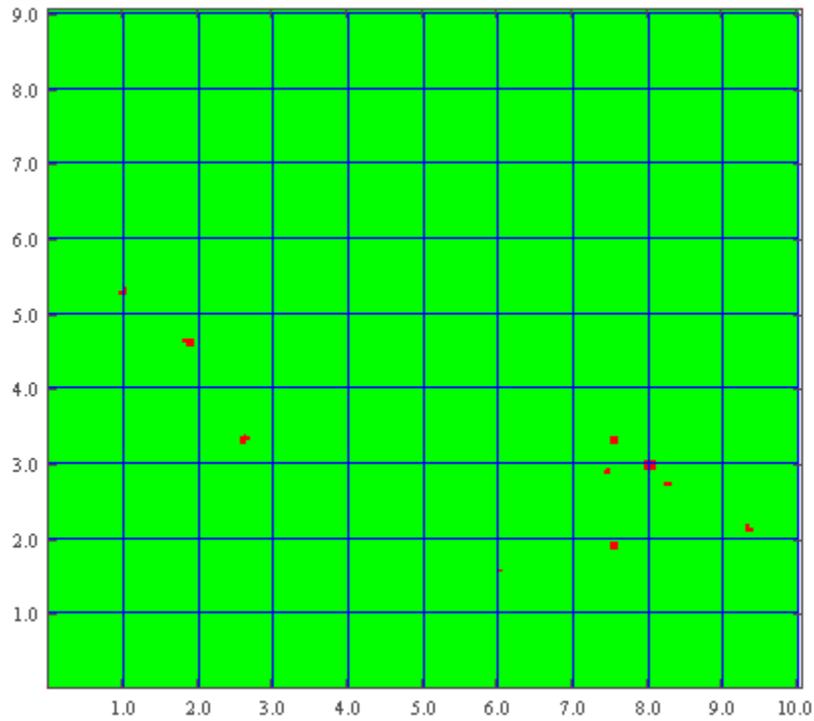


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	1014	362	(805,300)	(0,110)	N/A		
Spot	386	254	(265,335)	(0,145)	N/A		
Spot	293	438	(190,465)	(5,95)	N/A		
Spot	215	388	(935,215)	(0,25)	N/A		
Spot	180	422	(105,530)	(0,160)	N/A		
Spot	176	350	(750,290)	(5,100)	N/A		
Spot	156	352	(755,190)	(0,0)	N/A		
Spot	137	352	(755,330)	(0,140)	N/A		
Spot	130	122	(605,160)	(0,150)	N/A		
Spot	117	366	(825,275)	(0,85)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0821B
Survey Date:	December 6, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	461 dpm/100 cm²
Area Exceeding 100 cm² Levels:	1.48 m ²

This survey is not position correlated.

Primary Detector:

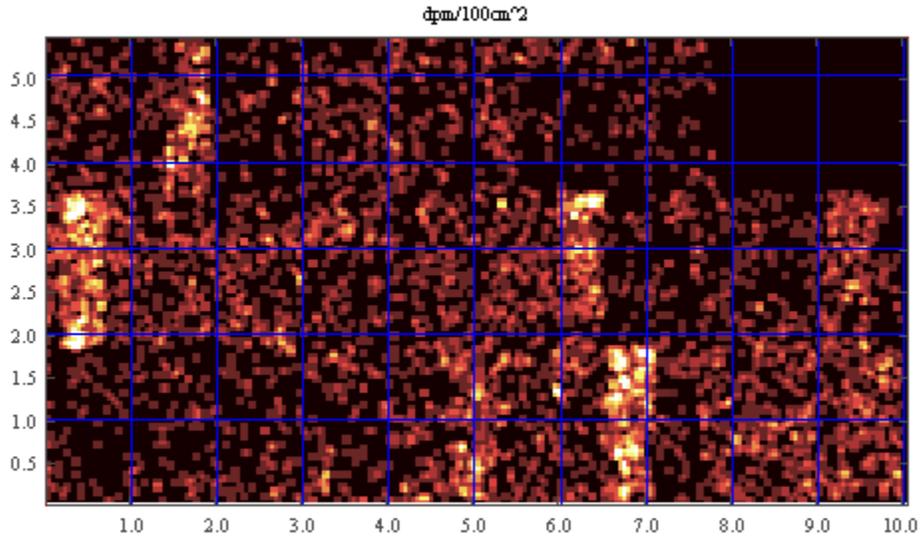


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

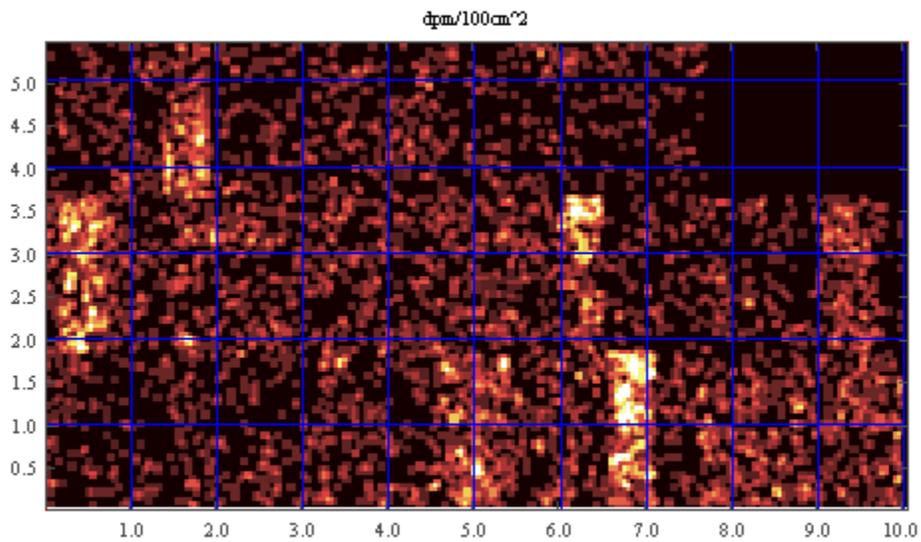


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

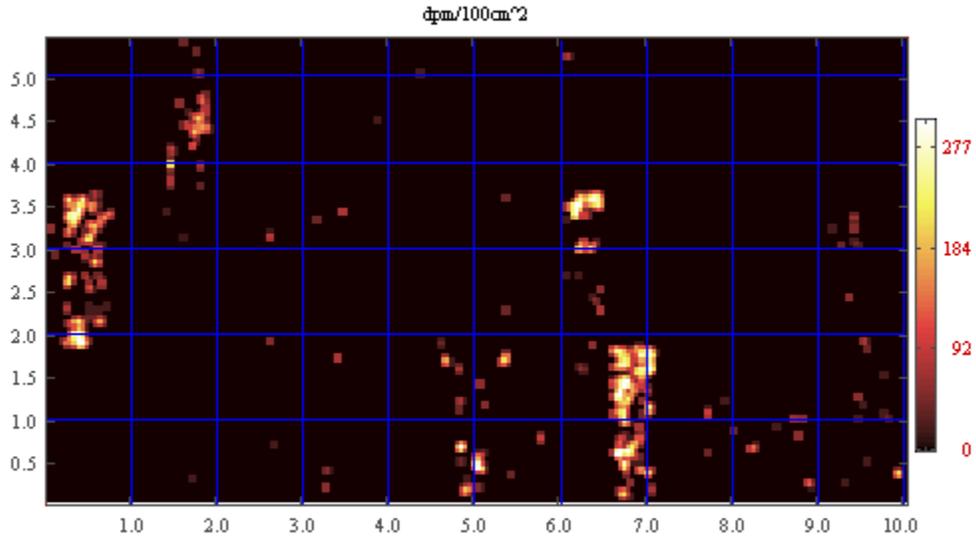


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

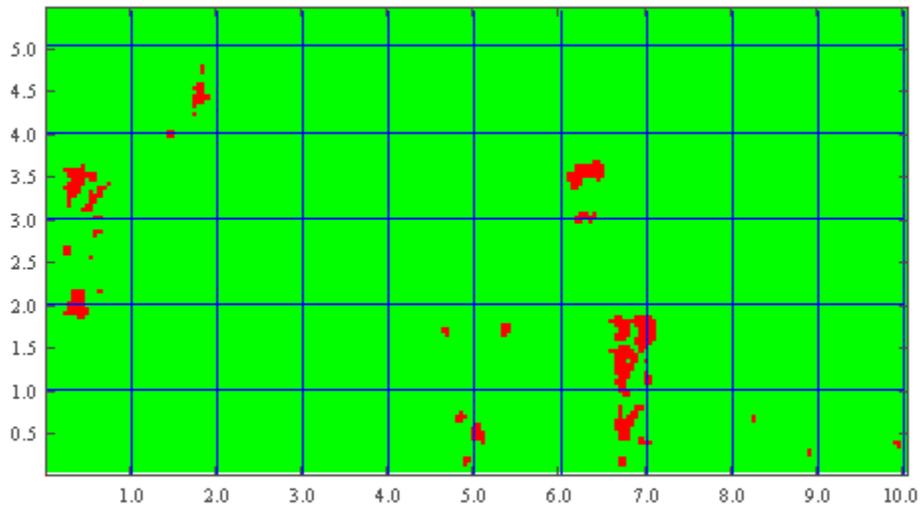


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	461	136	(675,145)	(0,135)	N/A		
Spot	371	208	(40,190)	(5,0)	N/A		
Spot	358	324	(620,350)	(5,160)	N/A		
Spot	351	98	(485,70)	(0,60)	N/A		
Spot	351	134	(670,60)	(5,50)	N/A		
Spot	345	142	(705,160)	(0,150)	N/A		
Spot	320	134	(670,130)	(5,120)	N/A		
Spot	301	102	(505,45)	(0,35)	N/A		
Spot	293	208	(40,345)	(5,155)	N/A		
Spot	293	328	(640,355)	(5,165)	N/A		
Spot	284	142	(705,175)	(0,165)	N/A		
Spot	272	136	(675,165)	(0,155)	N/A		
Spot	256	134	(665,180)	(0,170)	N/A		
Spot	255	136	(675,105)	(0,95)	N/A		
Spot	237	326	(625,300)	(0,110)	N/A		
Spot	234	208	(35,330)	(0,140)	N/A		
Spot	234	208	(40,215)	(5,25)	N/A		
Spot	234	210	(50,310)	(5,120)	N/A		
Spot	234	138	(685,70)	(0,60)	N/A		
Spot	232	142	(705,115)	(0,105)	N/A		
Spot	220	136	(675,45)	(0,35)	N/A		
Spot	215	136	(675,15)	(0,5)	N/A		
Spot	215	206	(30,265)	(5,75)	N/A		
Spot	215	212	(60,285)	(5,95)	N/A		
Spot	215	430	(145,395)	(0,25)	N/A		
Spot	215	138	(690,155)	(5,145)	N/A		
Spot	215	108	(535,170)	(0,160)	N/A		
Spot	215	200	(995,40)	(0,30)	N/A		
Spot	206	324	(620,335)	(5,145)	N/A		
Spot	205	436	(180,450)	(5,80)	N/A		
Spot	197	98	(490,20)	(5,10)	N/A		
Spot	195	212	(60,325)	(5,135)	N/A		
Spot	194	436	(175,435)	(0,65)	N/A		
Spot	193	140	(700,40)	(5,30)	N/A		
Spot	176	214	(65,215)	(0,25)	N/A		
Spot	176	94	(470,170)	(5,160)	N/A		

Spot	156	212	(55,345)	(0,155)	N/A		
Spot	156	328	(640,300)	(5,110)	N/A		
Spot	156	138	(685,130)	(0,120)	N/A		
Spot	156	138	(690,180)	(5,170)	N/A		
Spot	138	166	(825,70)	(0,60)	N/A		
Spot	137	206	(25,190)	(0,0)	N/A		
Spot	137	216	(75,340)	(0,150)	N/A		
Spot	132	438	(185,470)	(0,100)	N/A		
Spot	130	134	(670,75)	(5,65)	N/A		
Spot	129	178	(890,25)	(5,15)	N/A		
Spot	128	102	(505,60)	(0,50)	N/A		
Spot	117	206	(30,315)	(5,125)	N/A		
Spot	117	210	(45,360)	(0,170)	N/A		
Spot	117	212	(55,255)	(0,65)	N/A		
Spot	117	214	(65,300)	(0,110)	N/A		
Spot	117	206	(25,355)	(0,165)	N/A		
Spot	116	436	(175,420)	(0,50)	N/A		
Spot	108	140	(700,135)	(5,125)	N/A		
Spot	104	132	(660,145)	(5,135)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0831A
Survey Date:	December 3, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	192 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.05 m ²

This survey is not position correlated.

Primary Detector:

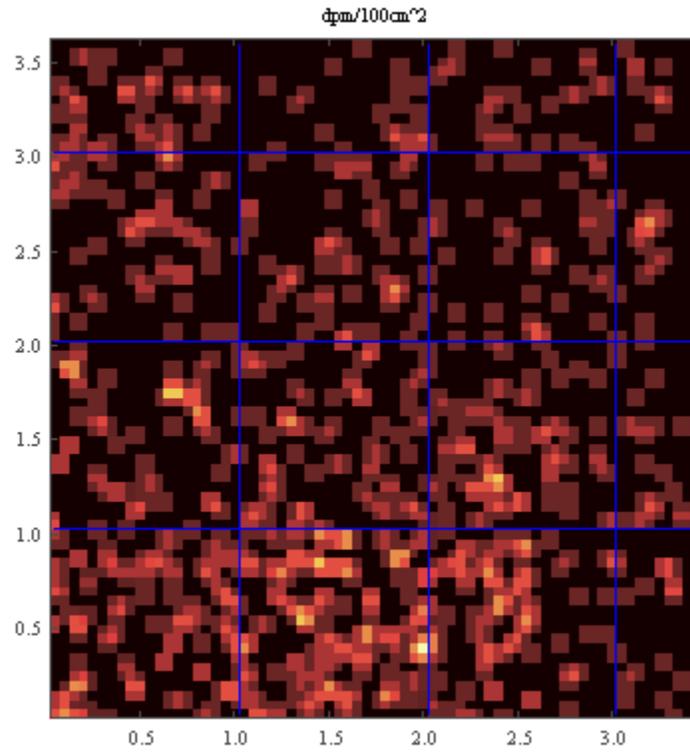


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

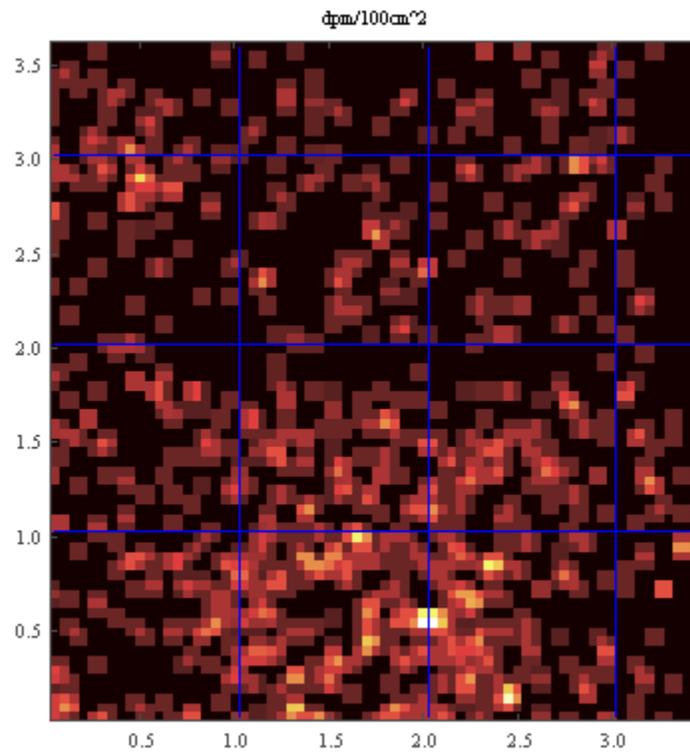


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

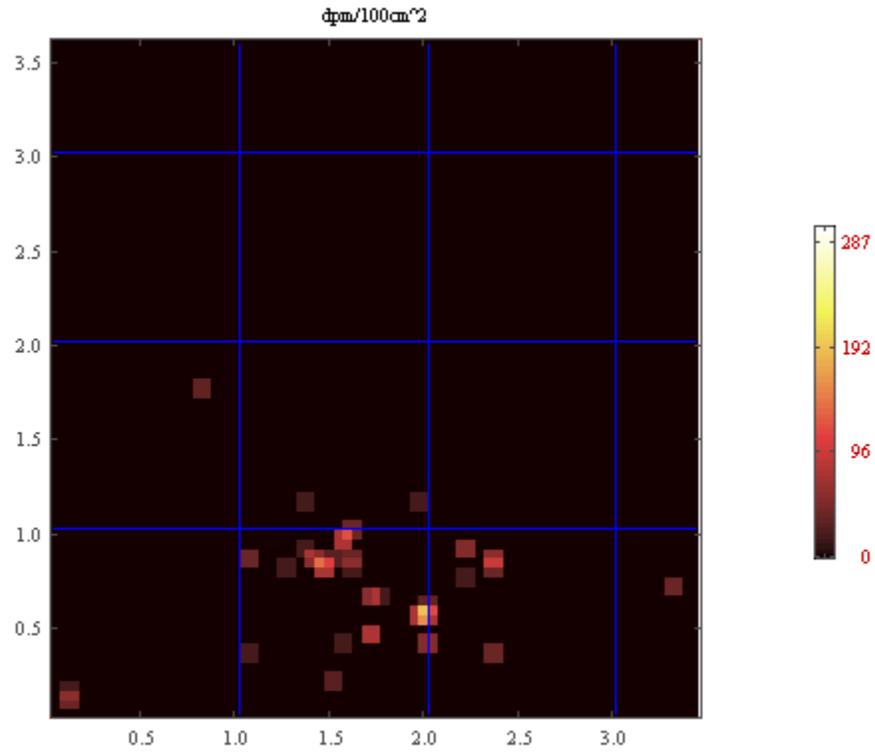


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

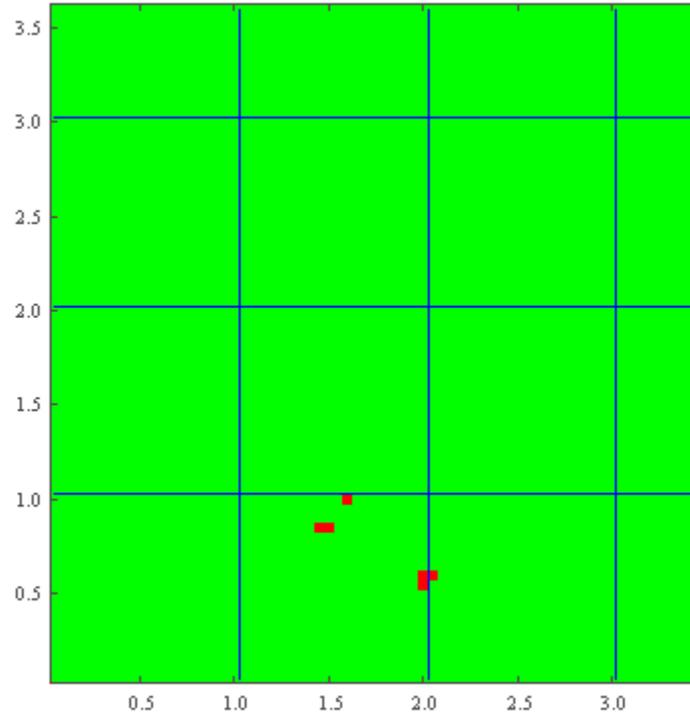


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	192	40	(200,60)	(5,55)	N/A		
Spot	137	30	(145,85)	(0,80)	N/A		
Spot	117	32	(160,100)	(5,95)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0901A
Survey Date:	November 29, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

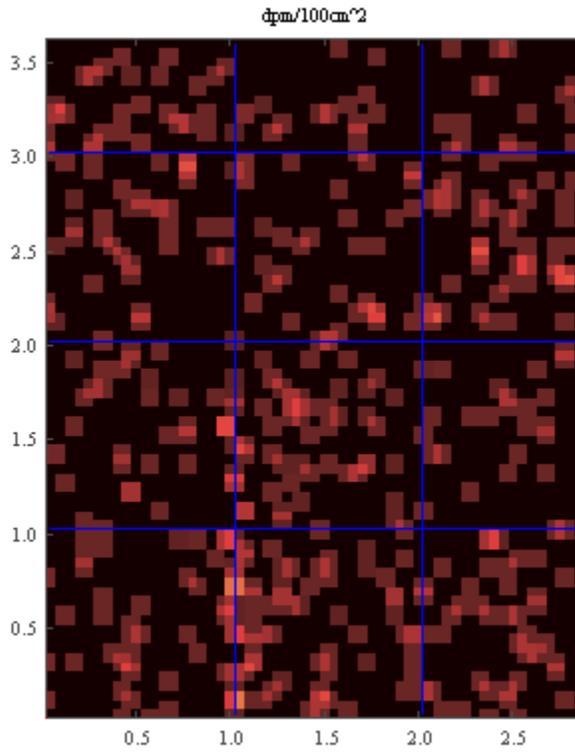


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

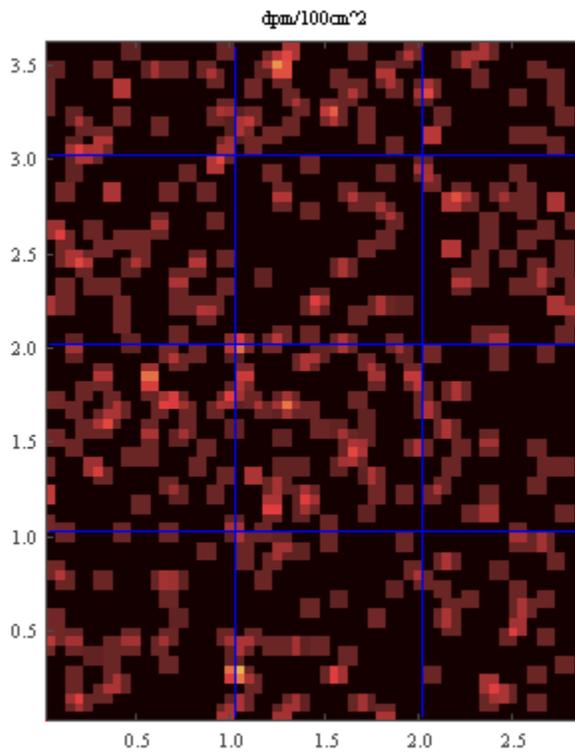


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

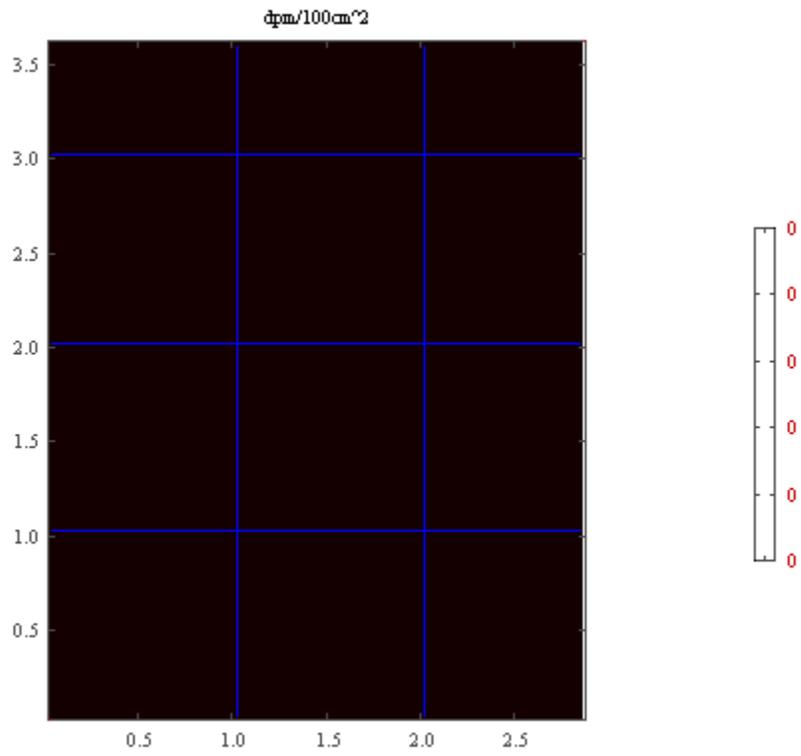


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA0901B
Survey Date:	December 1, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	878 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.30 m ²

This survey is not position correlated.

Primary Detector:

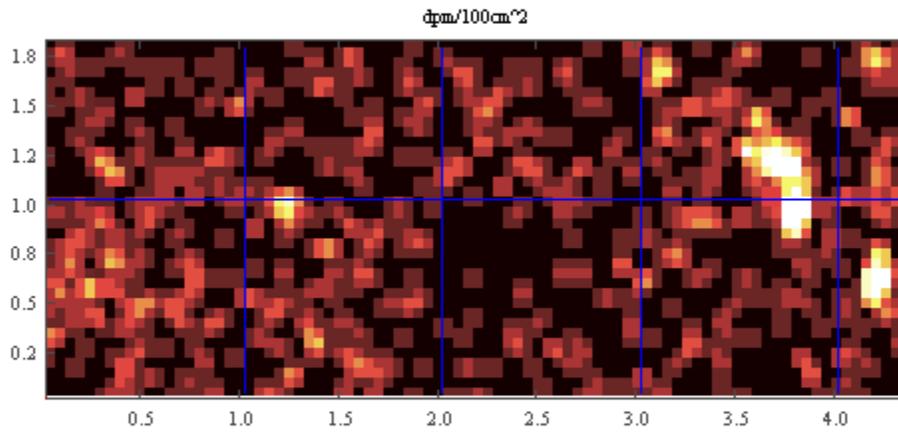


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

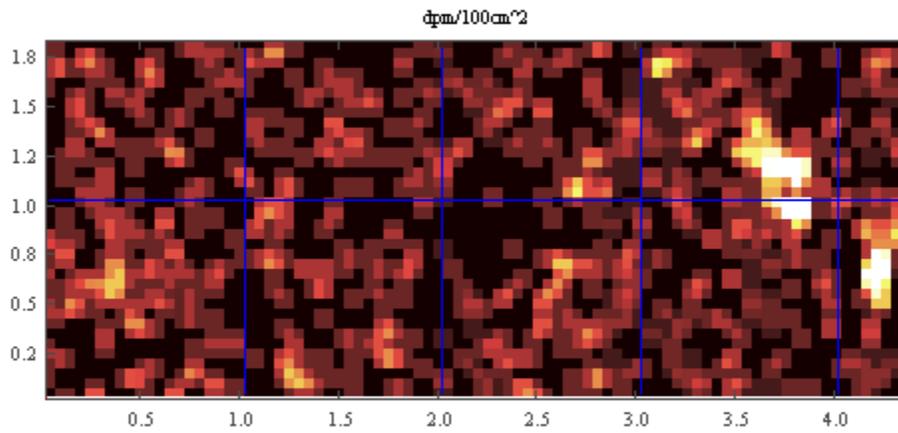


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

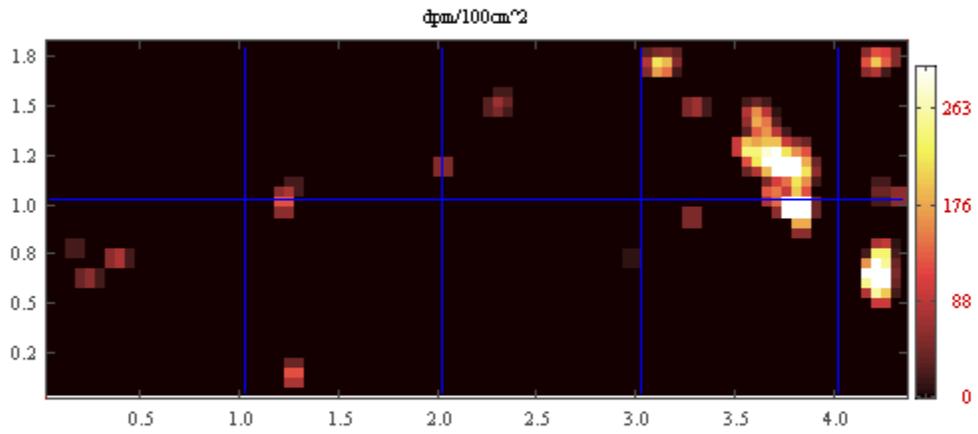


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

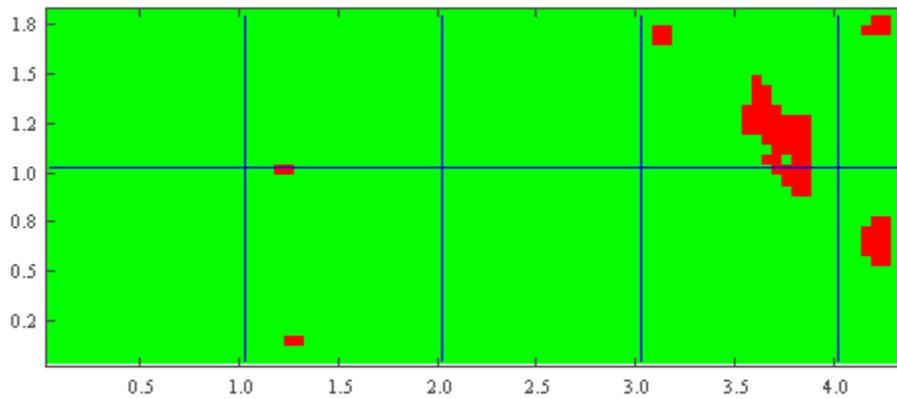


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	878	78	(380,100)	(0,95)	N/A		
Spot	660	86	(420,65)	(0,60)	N/A		
Spot	520	76	(370,120)	(0,115)	N/A		
Spot	237	72	(355,125)	(5,120)	N/A		
Spot	217	64	(310,170)	(0,165)	N/A		
Spot	215	78	(385,115)	(5,110)	N/A		
Spot	196	86	(420,170)	(0,165)	N/A		
Spot	177	74	(360,140)	(0,135)	N/A		
Spot	124	74	(365,105)	(5,100)	N/A		
Spot	117	24	(120,100)	(5,95)	N/A		
Spot	117	26	(125,15)	(0,10)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0911A
Survey Date:	December 1, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	197 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.12 m ²

This survey is not position correlated.

Primary Detector:

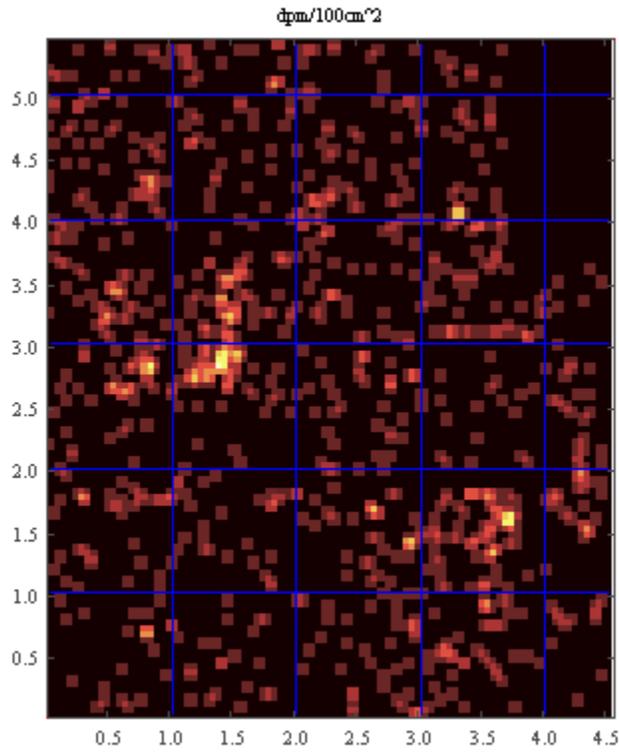


Figure 1: Meter Grid overlaid onto image plot of 100cm^2 areas..

Recount Detector:

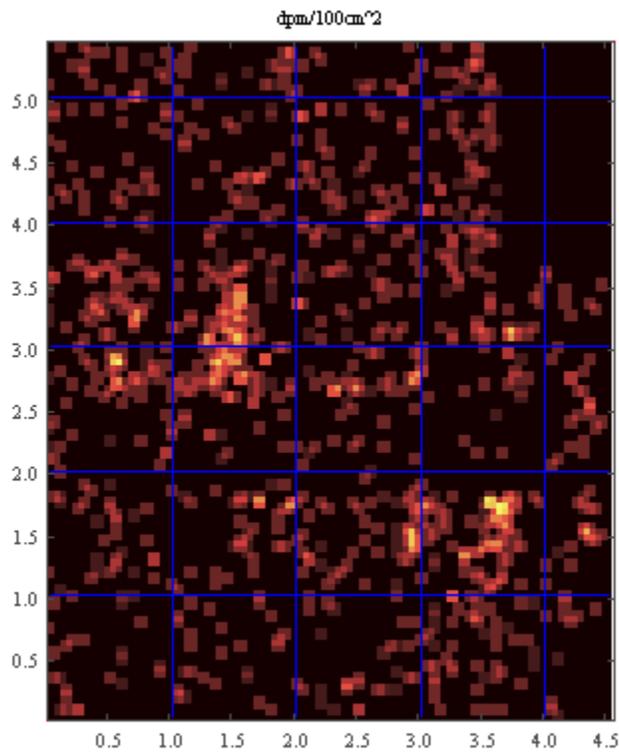


Figure 2: Meter Grid overlaid onto image plot of 100cm^2 areas..

Coincidence Logic:

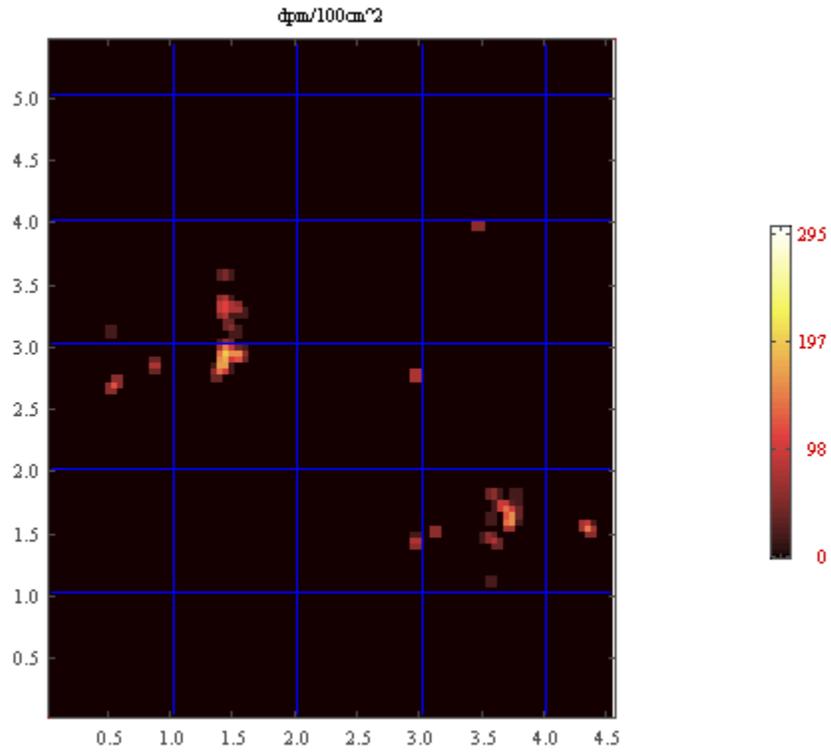


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

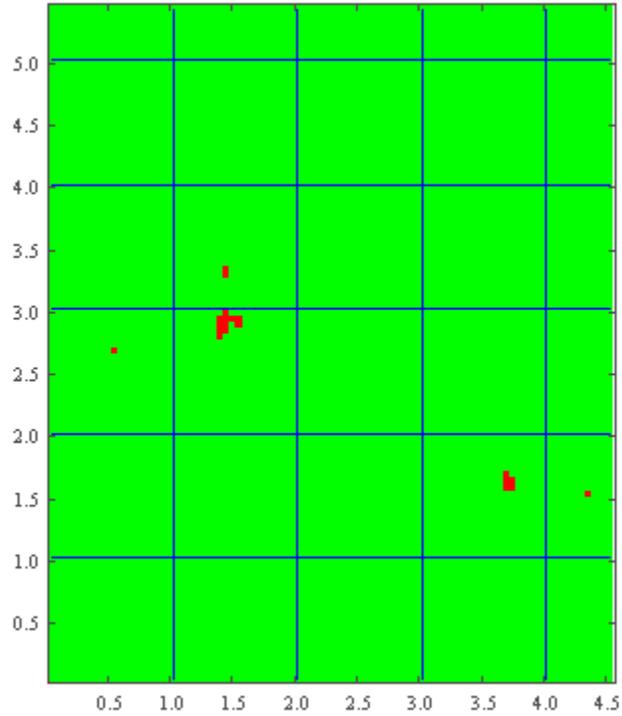


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	197	120	(145,295)	(0,105)	N/A		
Spot	158	76	(375,160)	(0,150)	N/A		
Spot	148	88	(435,155)	(0,145)	N/A		
Spot	137	118	(140,280)	(5,90)	N/A		
Spot	117	102	(55,270)	(0,80)	N/A		
Spot	110	120	(145,330)	(0,140)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0921A
Survey Date:	December 1, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	650 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.50 m ²

This survey is not position correlated.

Primary Detector:

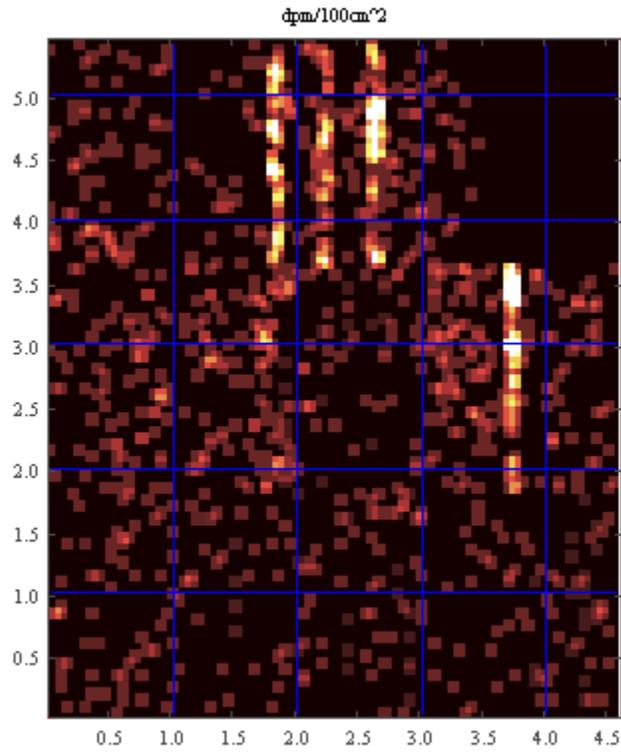


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

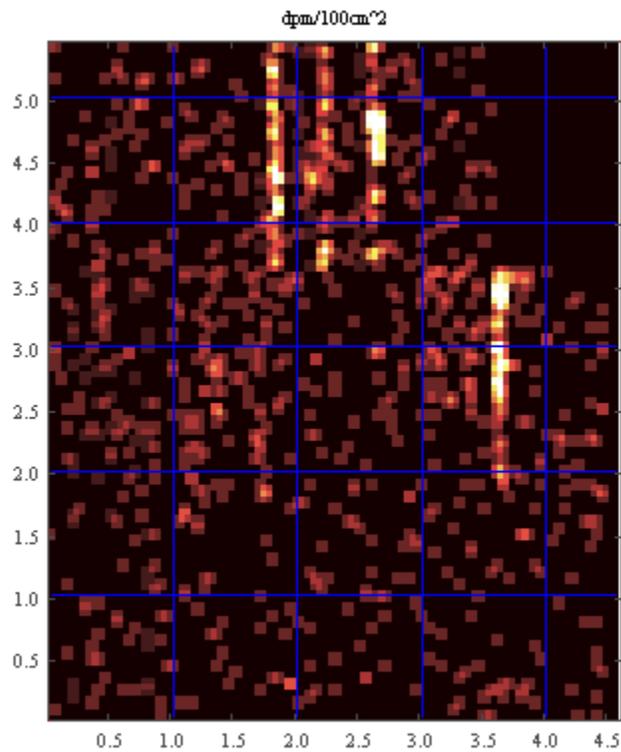


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

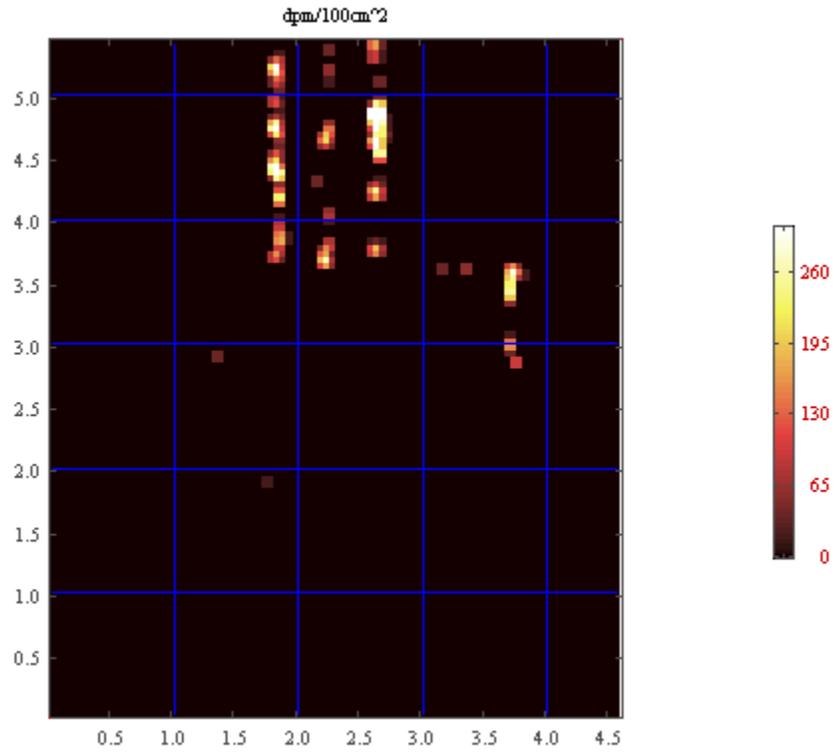


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

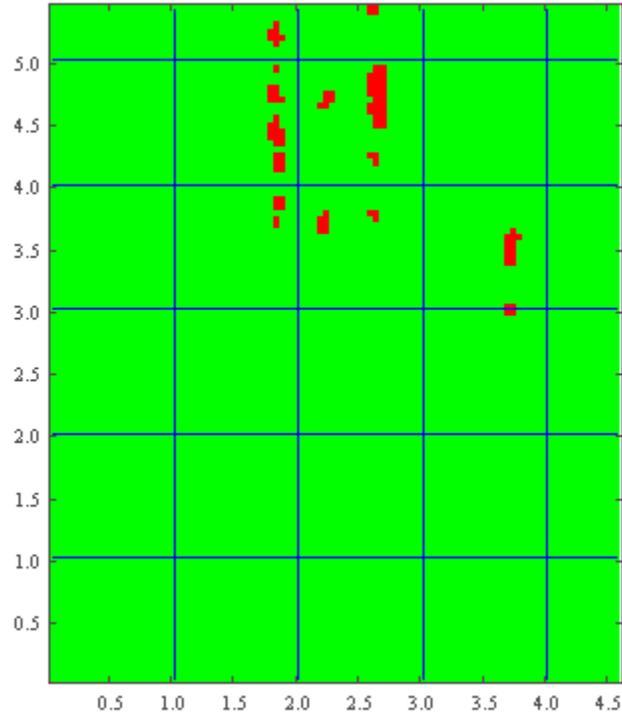


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	650	234	(265,490)	(0,120)	N/A		
Spot	485	218	(185,440)	(0,70)	N/A		
Spot	348	218	(185,475)	(0,105)	N/A		
Spot	344	234	(265,465)	(0,95)	N/A		
Spot	308	218	(185,525)	(0,155)	N/A		
Spot	293	165	(375,360)	(0,170)	N/A		
Spot	265	226	(225,370)	(0,0)	N/A		
Spot	254	163	(370,345)	(5,155)	N/A		
Spot	248	234	(265,425)	(0,55)	N/A		
Spot	234	218	(185,420)	(0,50)	N/A		
Spot	211	226	(225,465)	(0,95)	N/A		
Spot	190	234	(265,380)	(0,10)	N/A		
Spot	175	218	(190,385)	(5,15)	N/A		
Spot	167	234	(265,540)	(0,170)	N/A		
Spot	156	163	(370,300)	(5,110)	N/A		
Spot	117	218	(185,455)	(0,85)	N/A		
Spot	117	234	(265,450)	(0,80)	N/A		
Spot	116	218	(185,370)	(0,0)	N/A		
Spot	115	218	(185,495)	(0,125)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA0931A
Survey Date:	December 2, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

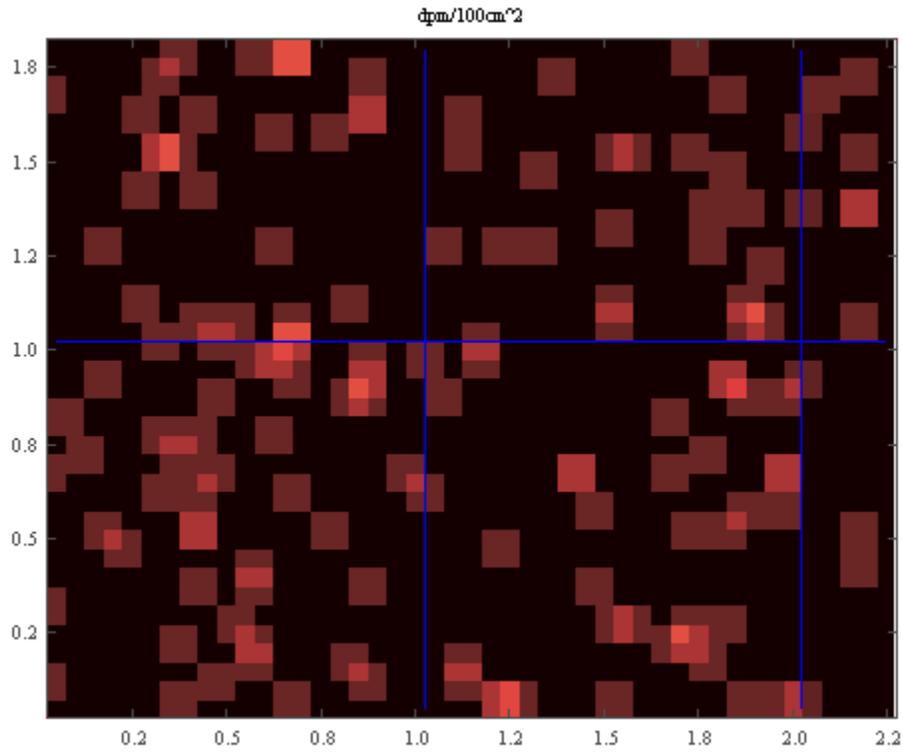


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

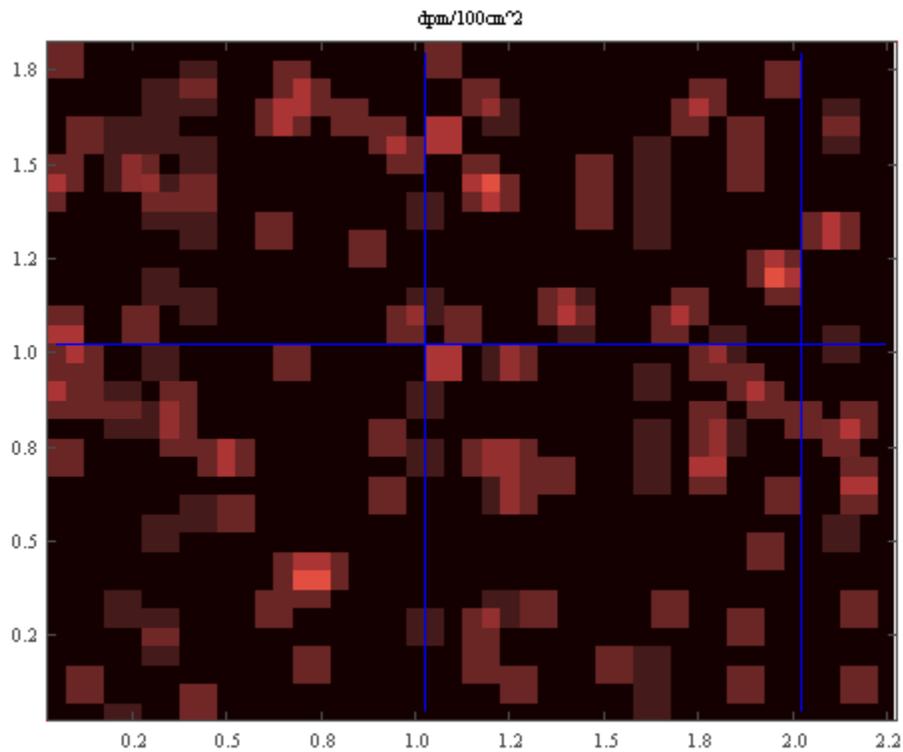


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

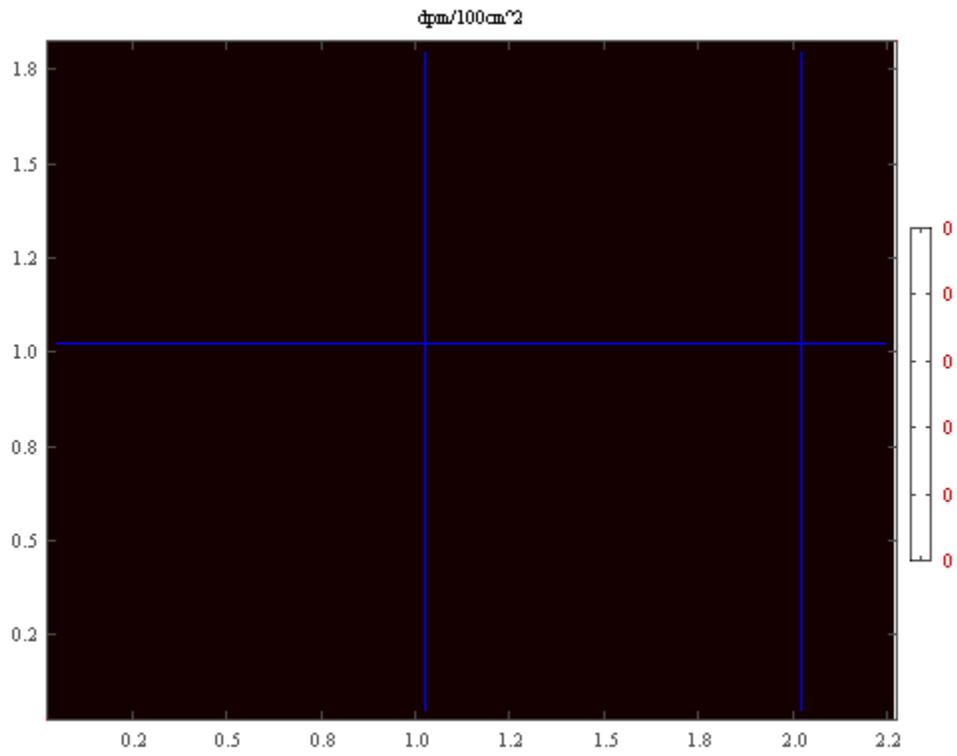


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1001A
Survey Date:	November 29, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	292 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.18 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

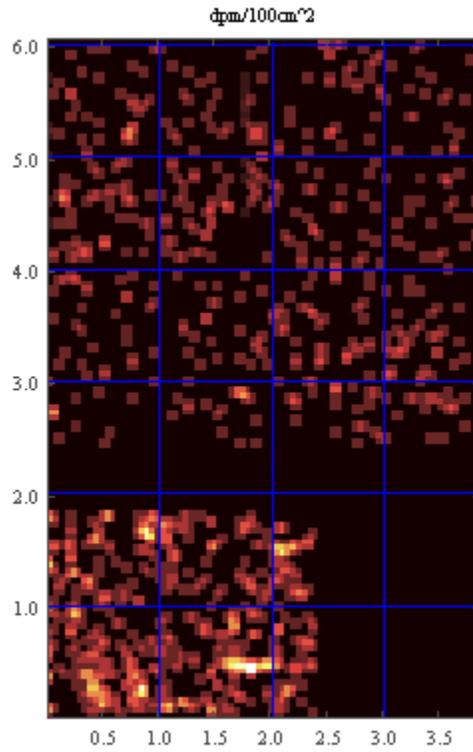


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

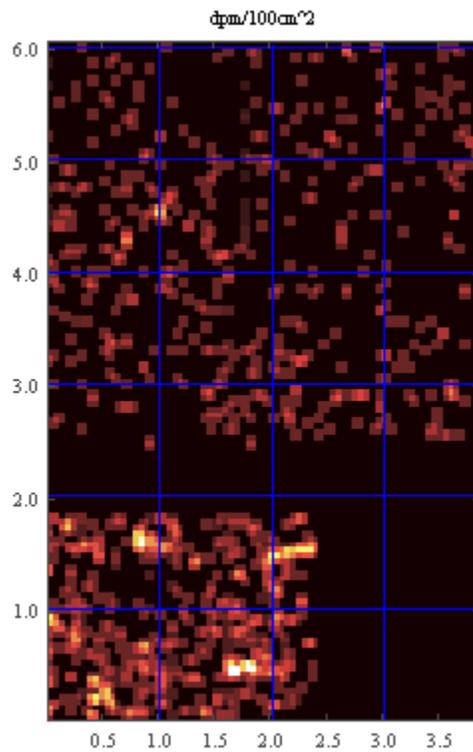


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

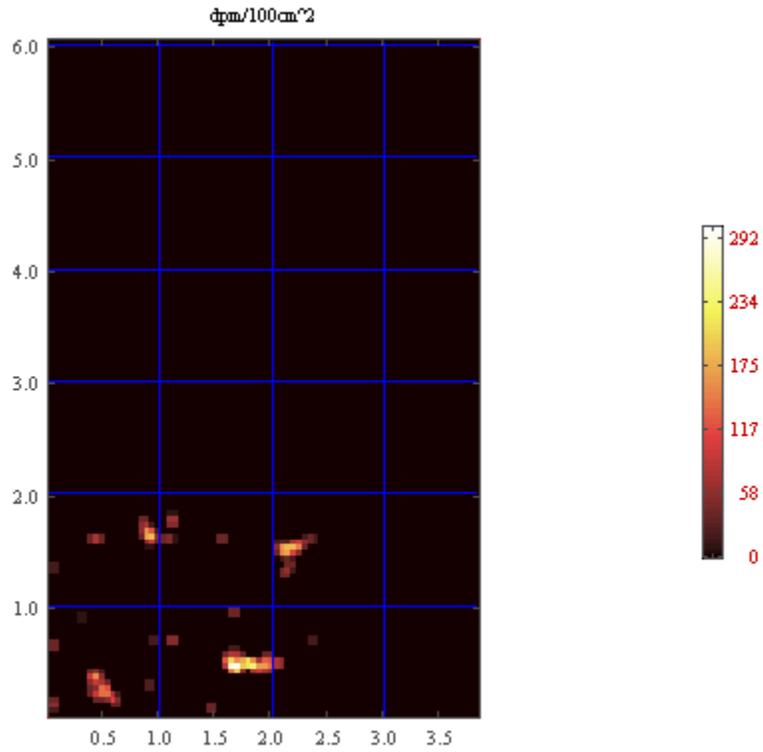


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

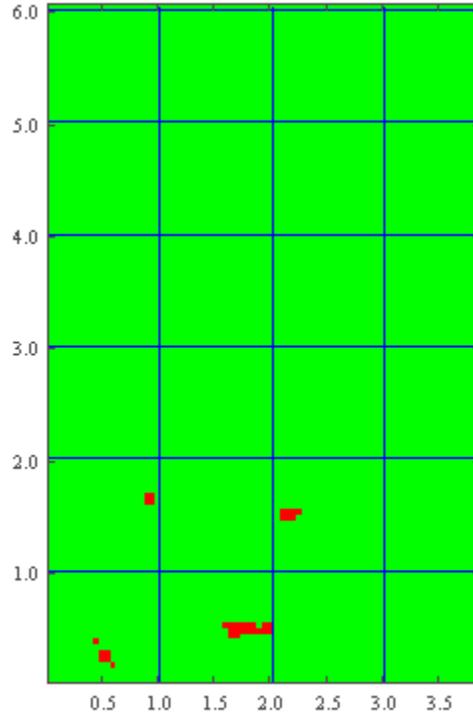


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	292	38	(170,50)	(5,40)	N/A		
Spot	234	42	(185,50)	(0,40)	N/A		
Spot	192	24	(95,165)	(0,155)	N/A		
Spot	188	48	(220,155)	(5,145)	N/A		
Spot	156	14	(45,40)	(0,30)	N/A		
Spot	137	16	(55,25)	(0,15)	N/A		
Spot	137	44	(200,50)	(5,40)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1011A
Survey Date:	November 30, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

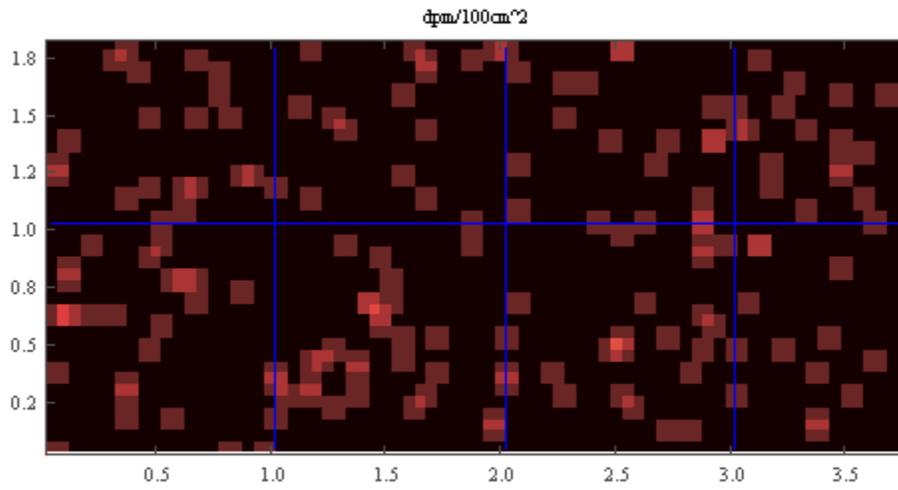


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

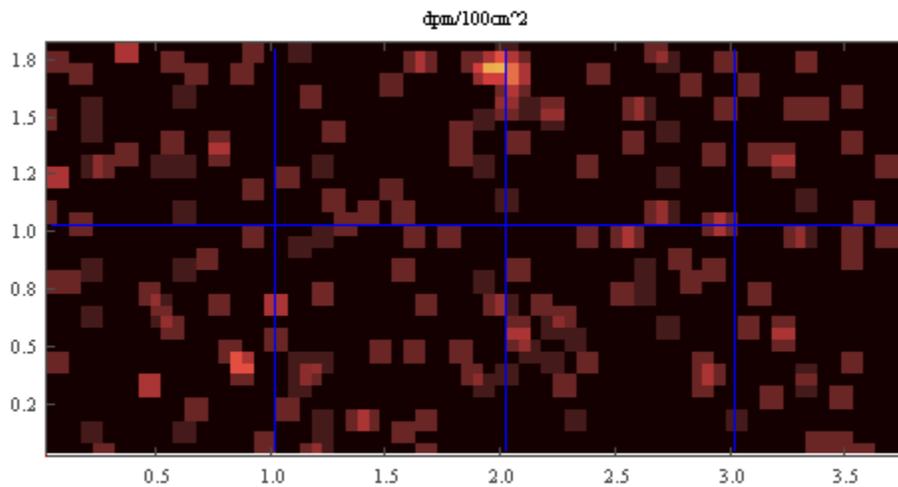


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

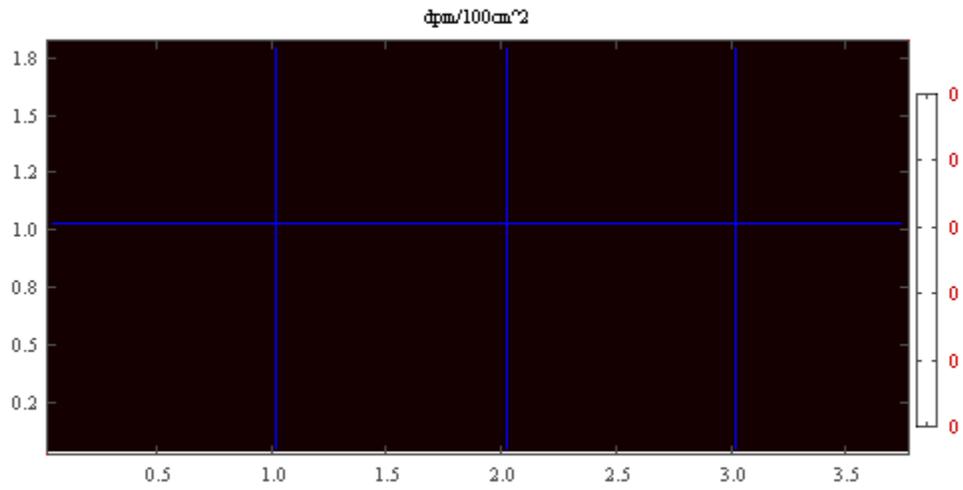


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1021A
Survey Date:	November 30, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

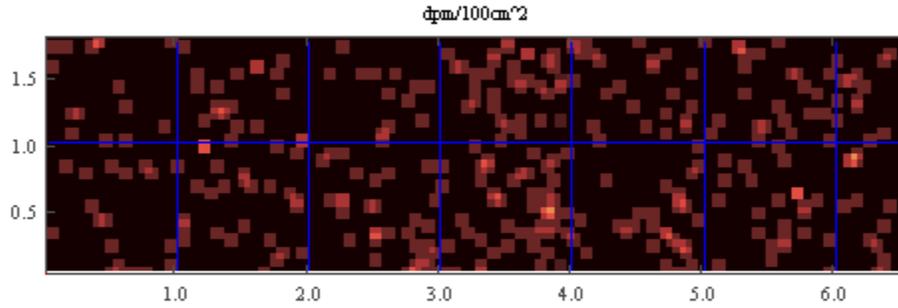


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

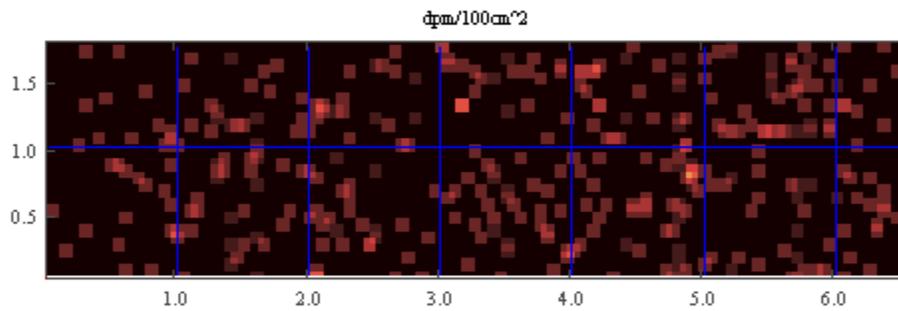


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

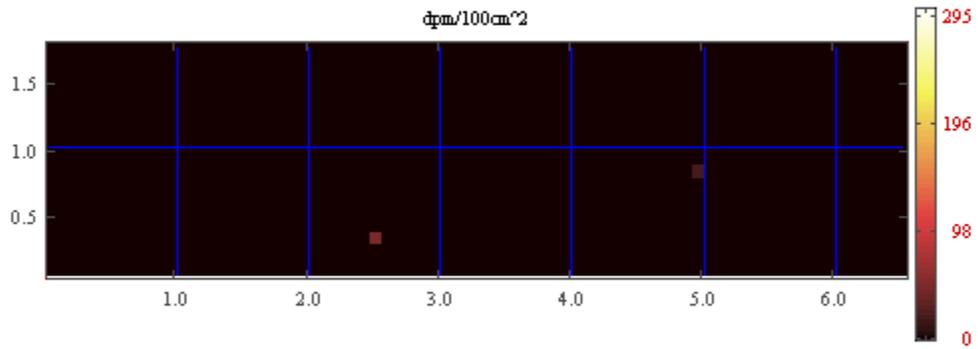


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1021C
Survey Date:	March 7, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	605 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.30 m ²

This survey is not position correlated.

Primary Detector:

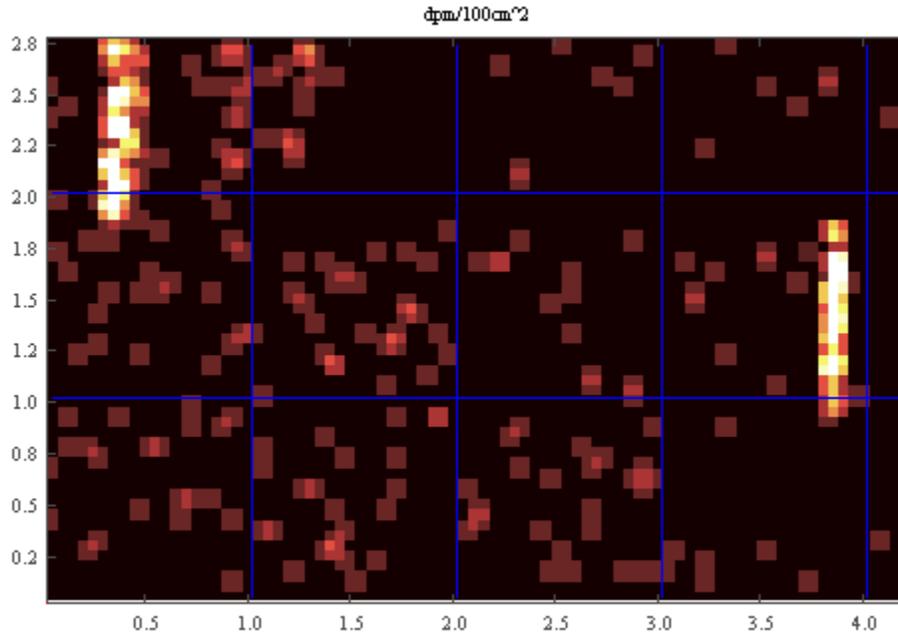


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

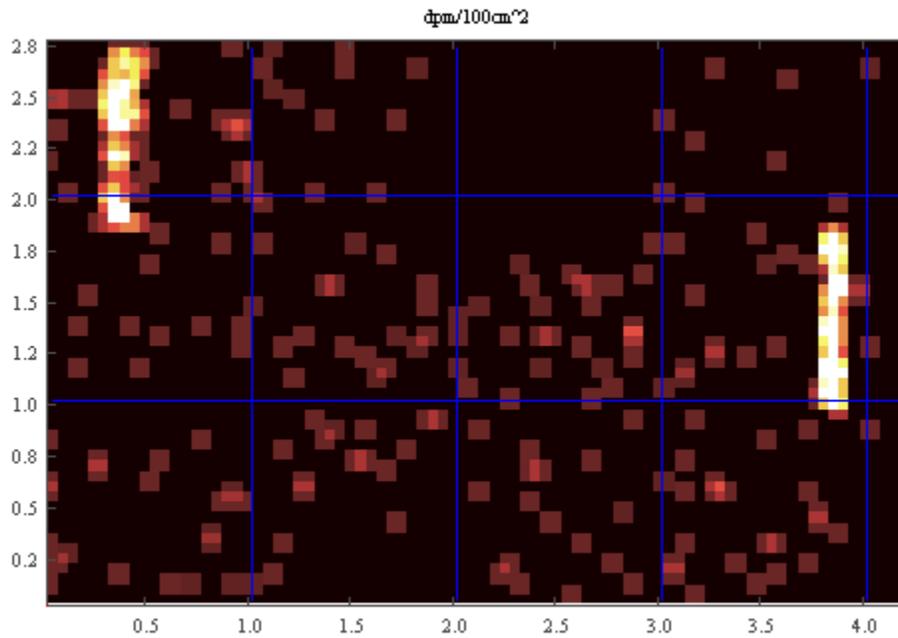


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

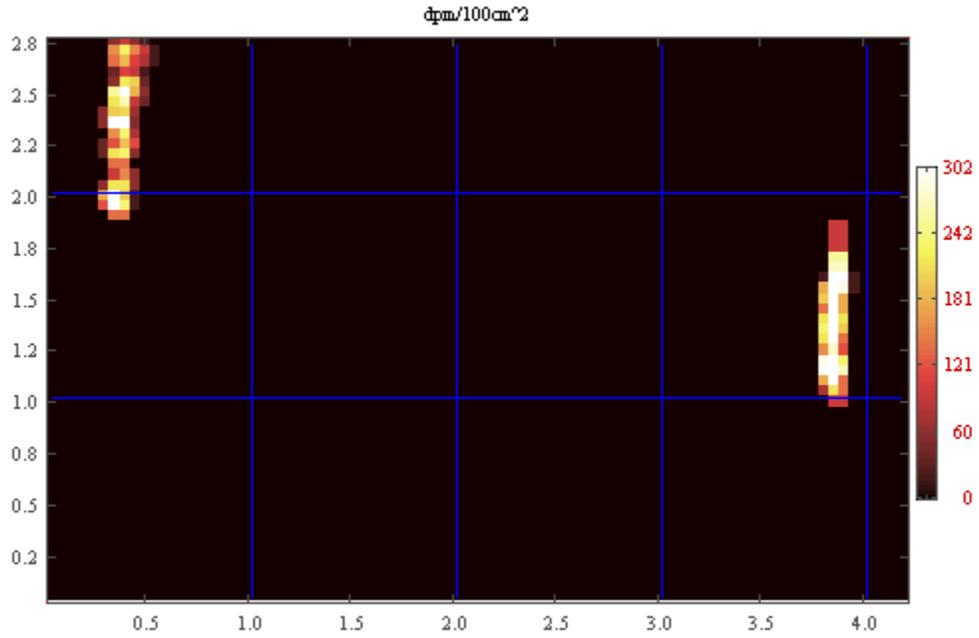


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

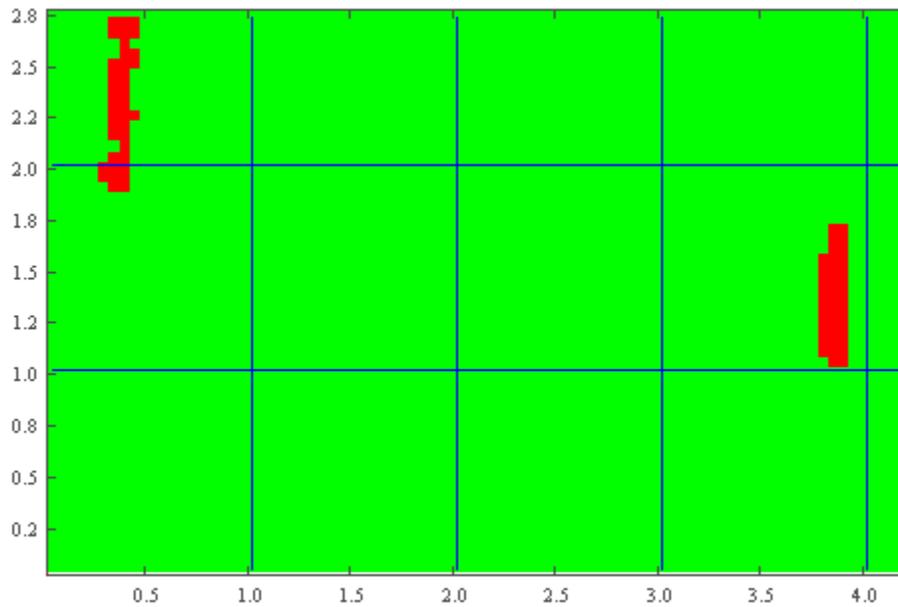


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	605	160	(385,115)	(0,15)	N/A		
Spot	449	160	(385,155)	(0,55)	N/A		
Spot	429	160	(385,135)	(0,35)	N/A		
Spot	378	172	(40,250)	(5,60)	N/A		
Spot	351	172	(35,200)	(0,10)	N/A		
Spot	332	172	(35,235)	(0,45)	N/A		
Spot	254	160	(385,170)	(0,70)	N/A		
Spot	232	172	(40,220)	(5,30)	N/A		
Spot	229	172	(40,270)	(5,80)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1031A
Survey Date:	December 2, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

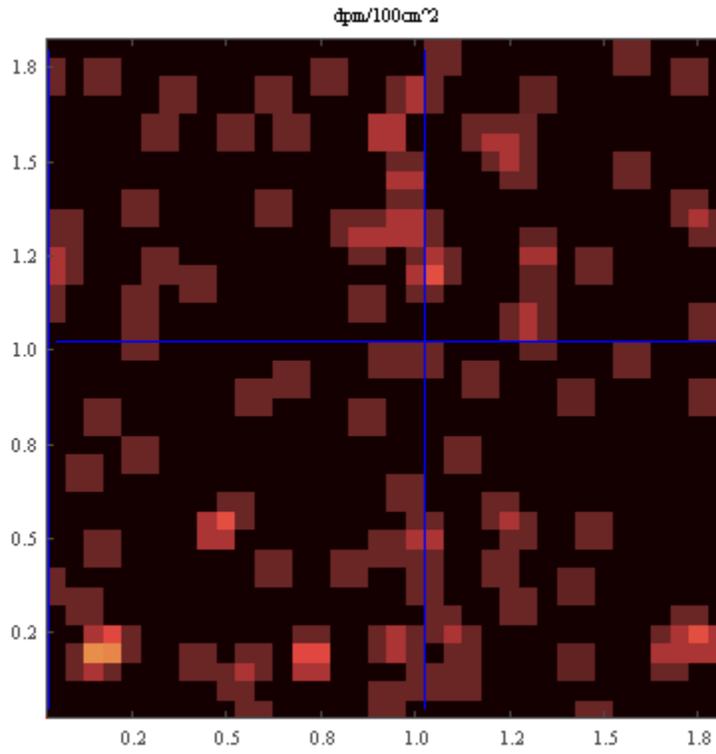


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

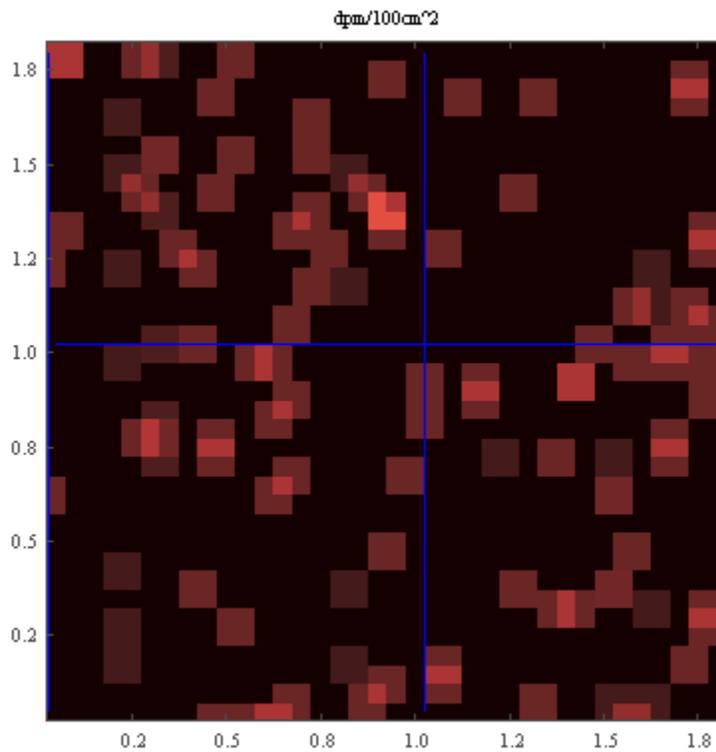


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

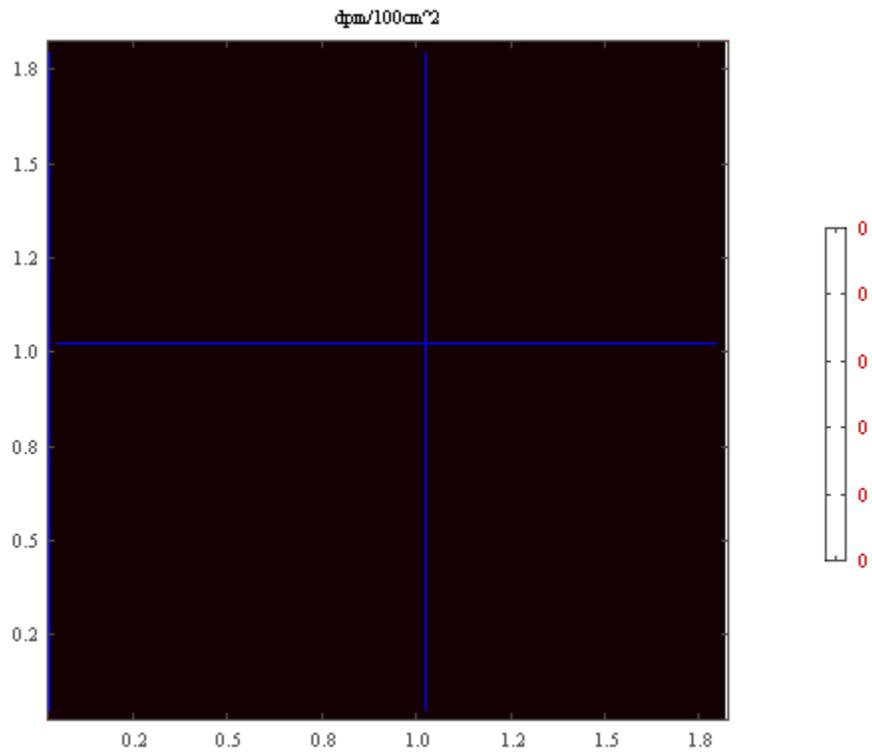


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1101A
Survey Date:	November 29, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 0.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	105 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.01 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

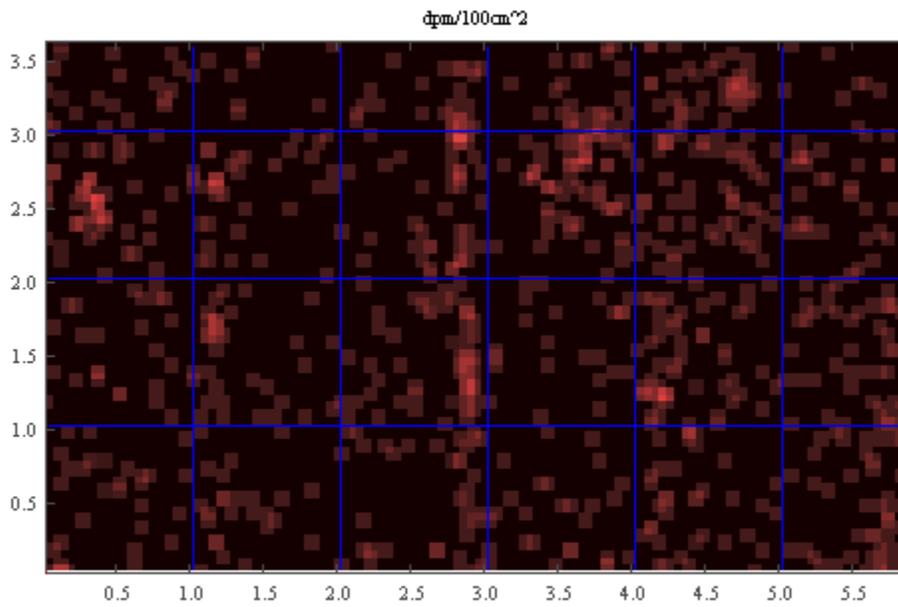


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

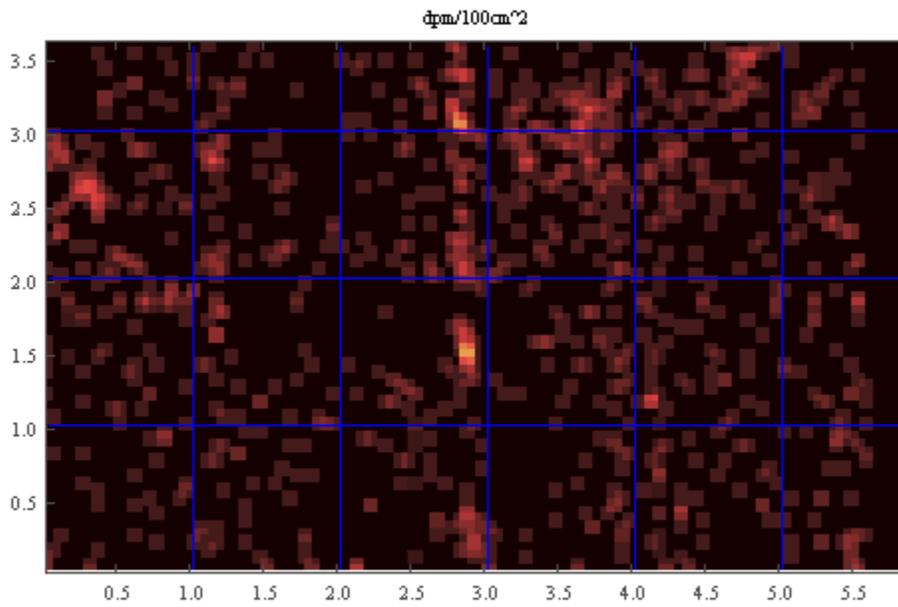


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

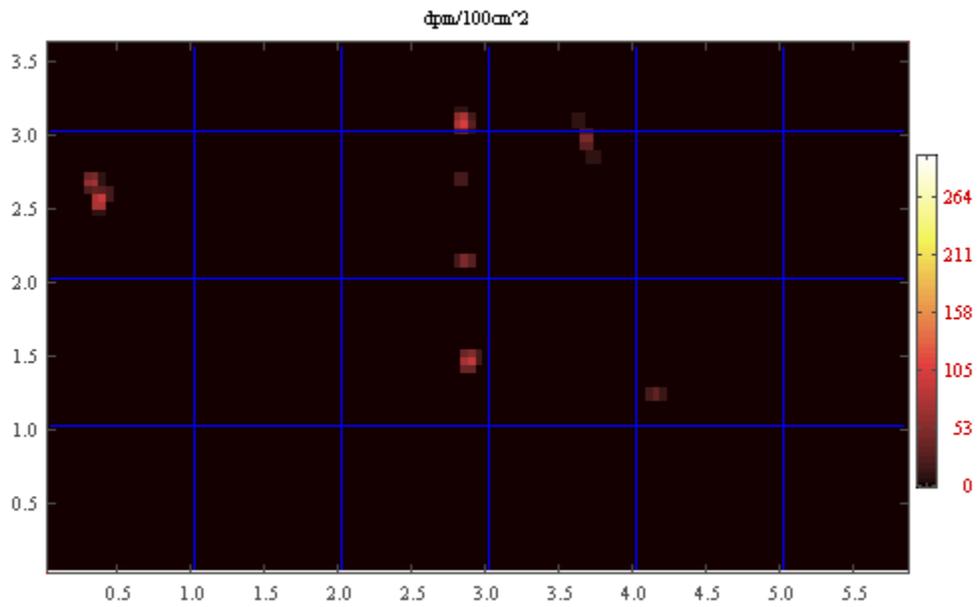


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	105	3	(285,305)	(280,120)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1101B
Survey Date:	November 30, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	543 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.60 m ²

This survey is not position correlated.

Primary Detector:

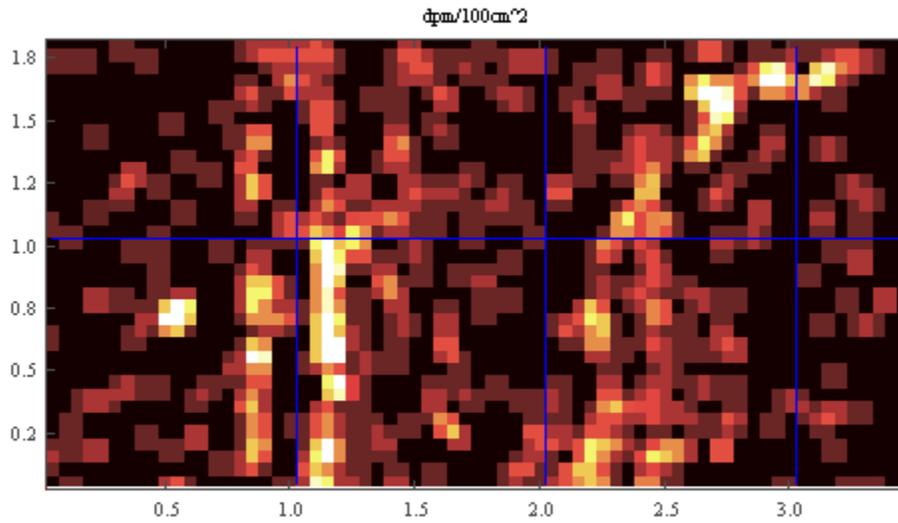


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

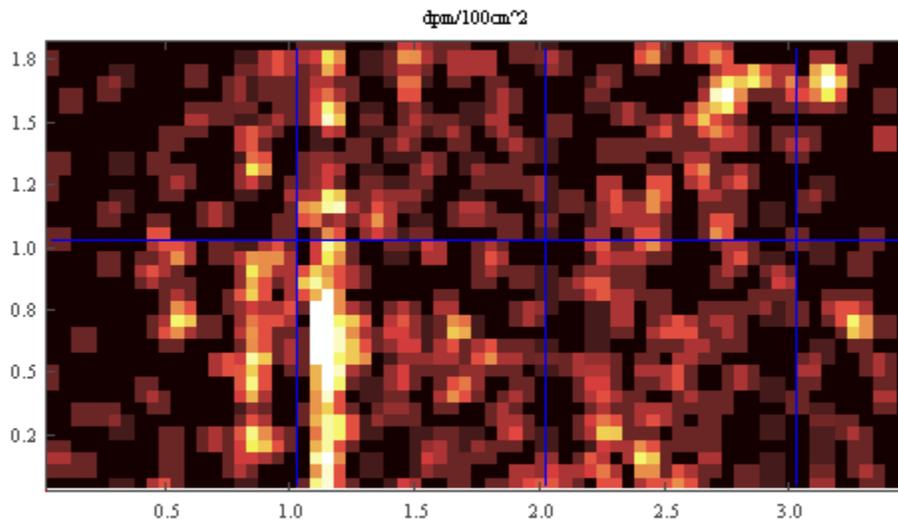


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

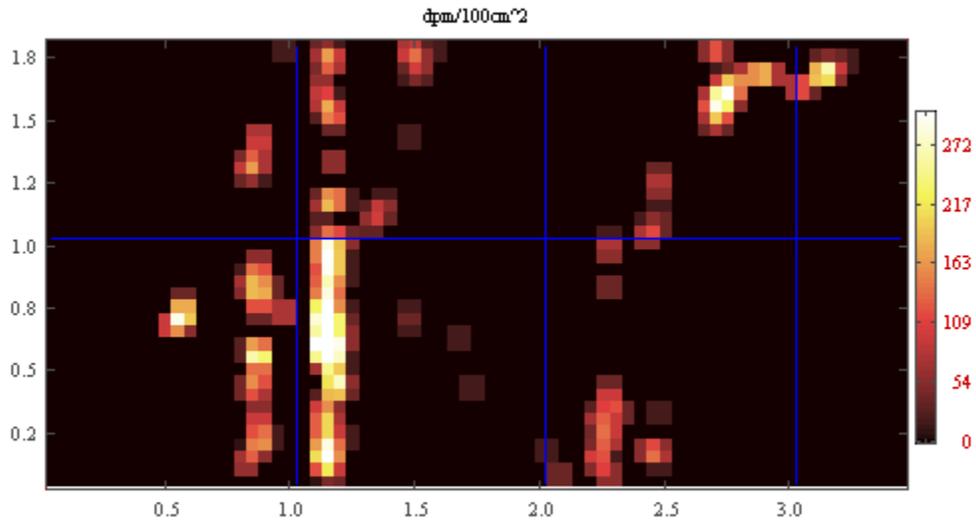


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

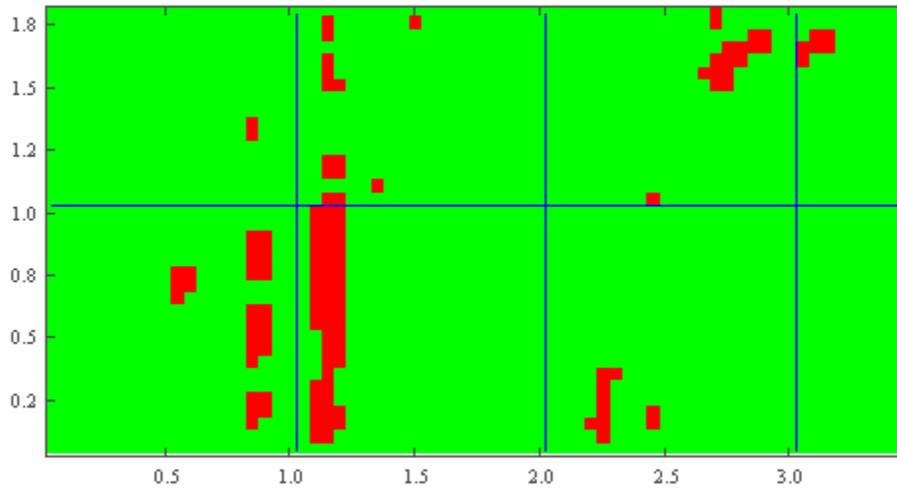


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	543	28	(115,60)	(0,55)	N/A		
Spot	366	28	(115,75)	(0,70)	N/A		
Spot	365	28	(115,15)	(0,10)	N/A		
Spot	323	28	(115,95)	(0,90)	N/A		
Spot	312	60	(275,160)	(0,155)	N/A		
Spot	292	16	(55,70)	(0,65)	N/A		
Spot	270	28	(120,45)	(5,40)	N/A		
Spot	264	22	(85,55)	(0,50)	N/A		
Spot	261	68	(315,170)	(0,165)	N/A		
Spot	207	28	(115,30)	(0,25)	N/A		
Spot	187	22	(85,80)	(0,75)	N/A		
Spot	186	28	(115,115)	(0,110)	N/A		
Spot	177	28	(115,155)	(0,150)	N/A		
Spot	176	62	(290,165)	(5,160)	N/A		
Spot	168	22	(85,130)	(0,125)	N/A		
Spot	167	28	(115,175)	(0,170)	N/A		
Spot	156	22	(90,20)	(5,15)	N/A		
Spot	138	50	(225,25)	(0,20)	N/A		
Spot	138	34	(150,175)	(5,170)	N/A		
Spot	136	54	(245,15)	(0,10)	N/A		
Spot	120	22	(85,40)	(0,35)	N/A		
Spot	117	58	(270,175)	(5,170)	N/A		
Spot	116	54	(245,105)	(0,100)	N/A		
Spot	110	50	(225,10)	(0,5)	N/A		
Spot	101	32	(135,110)	(0,105)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1111A
Survey Date:	November 30, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	195 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

This survey is not position correlated.

Primary Detector:

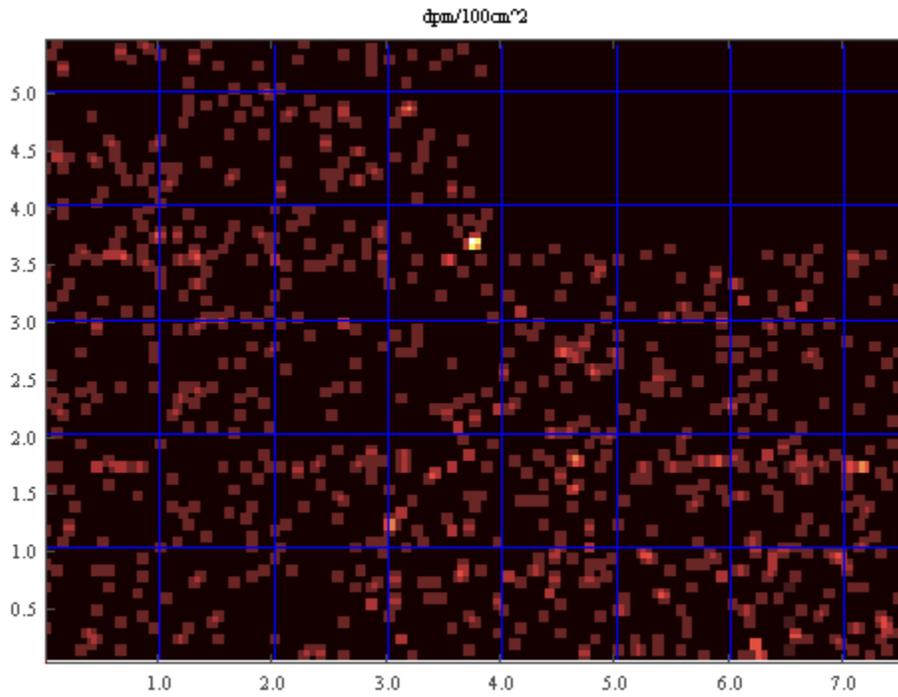


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

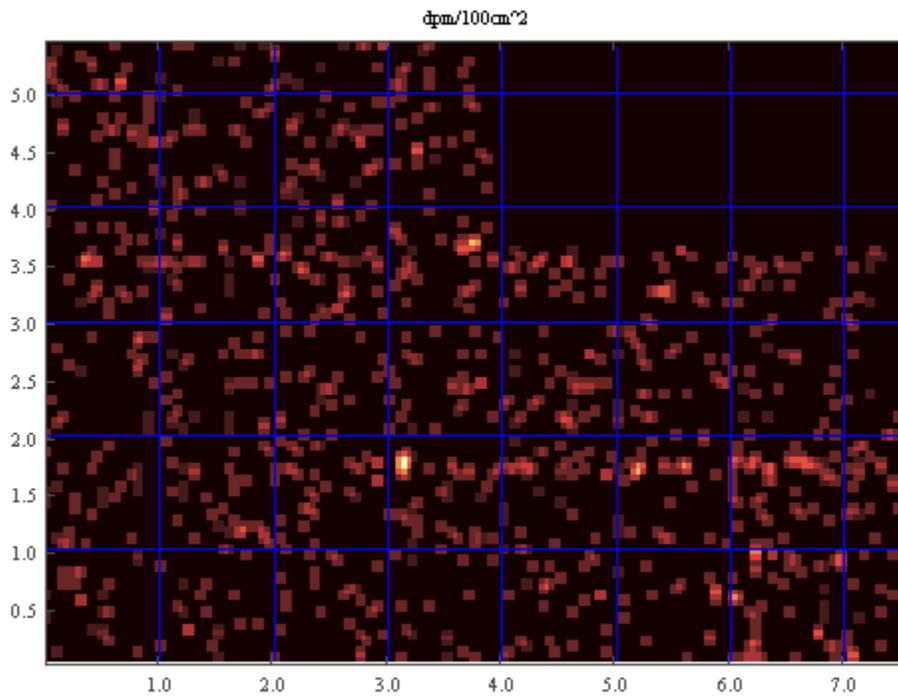


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

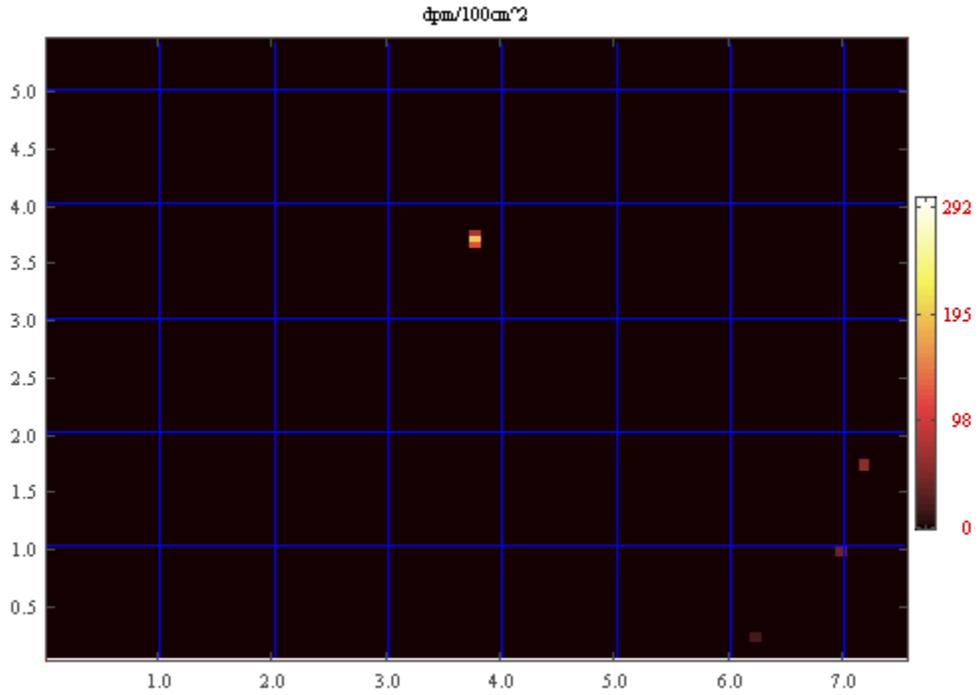


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

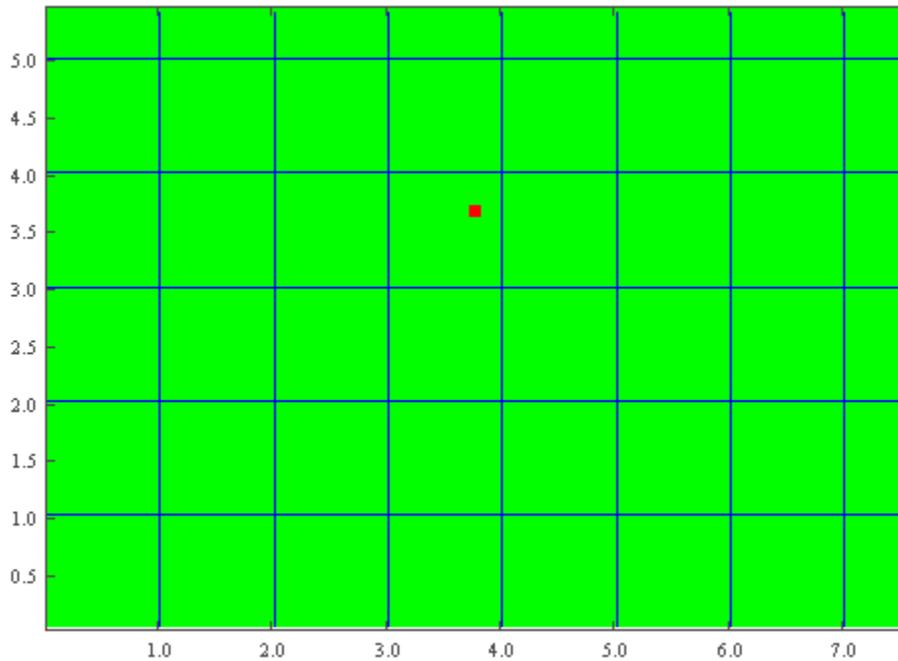


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	195	376	(375,370)	(0,0)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1121A
Survey Date:	November 30, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

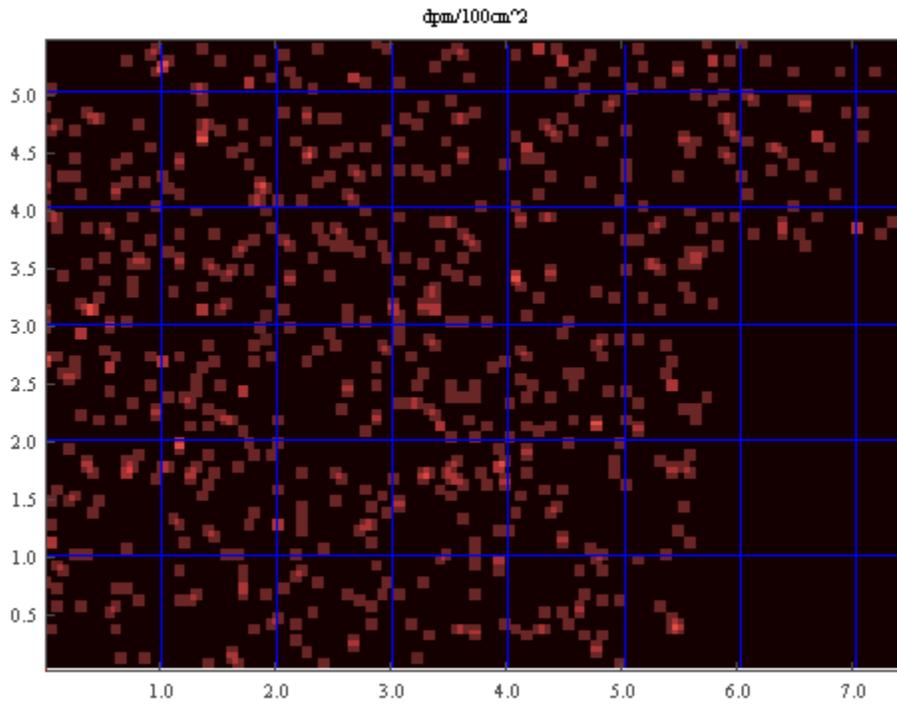


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

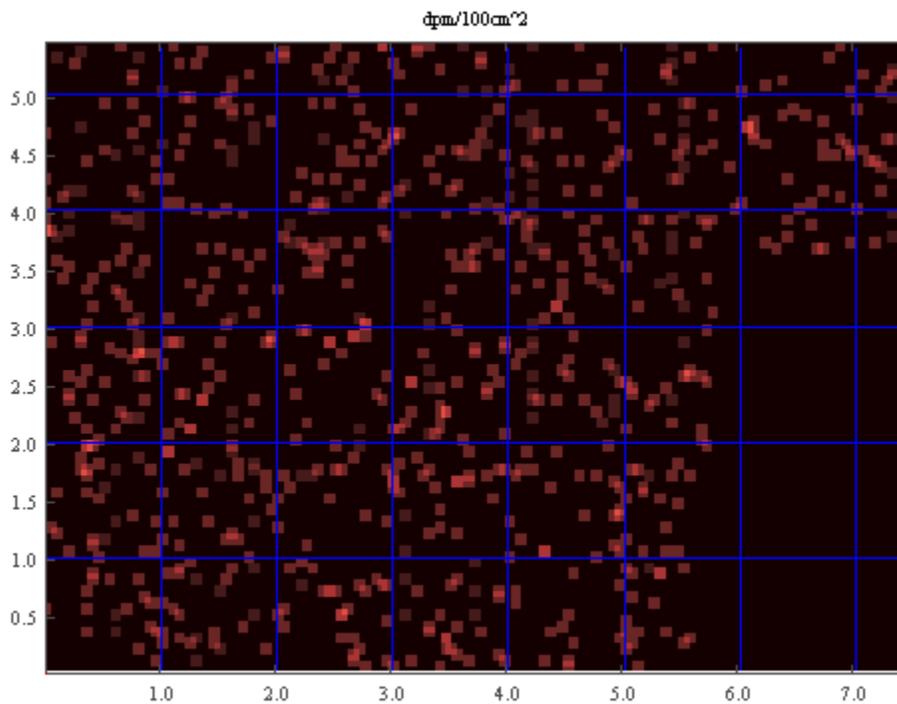


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

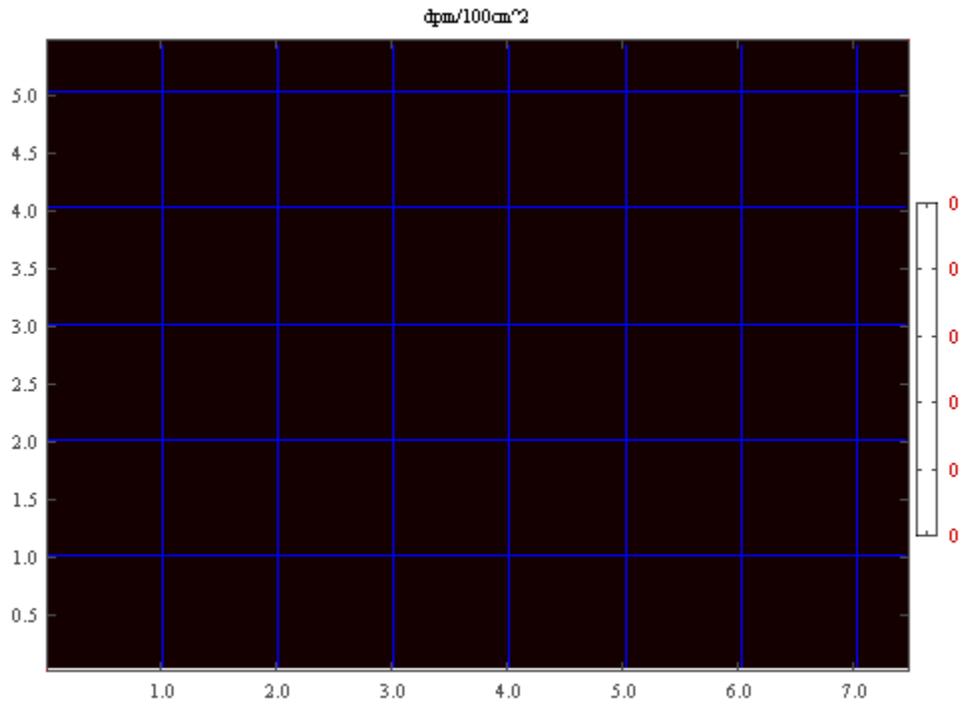


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1131A
Survey Date:	December 3, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

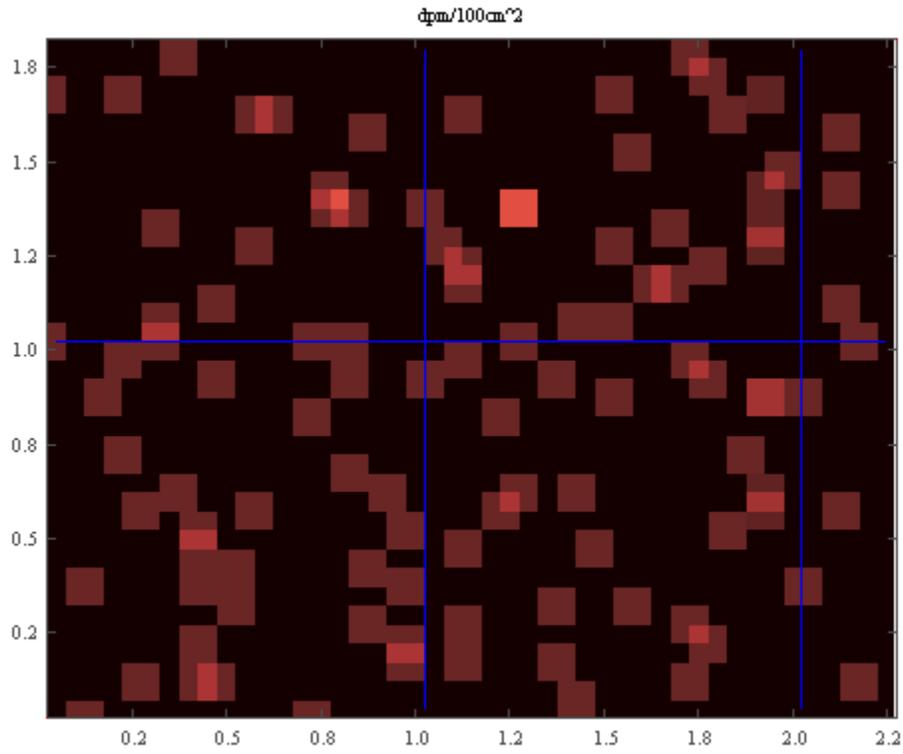


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

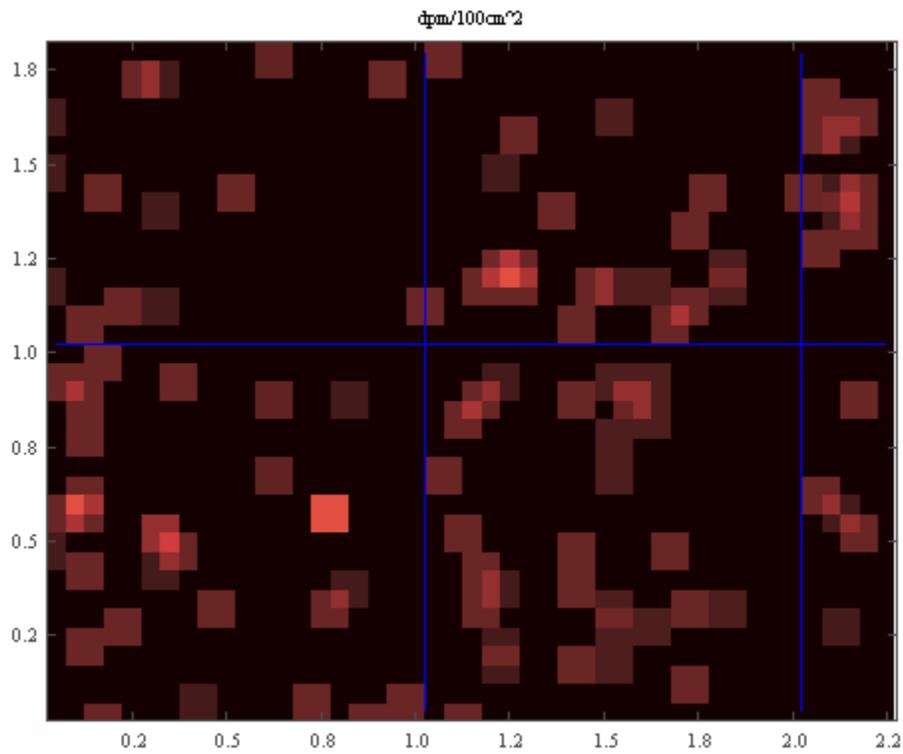


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

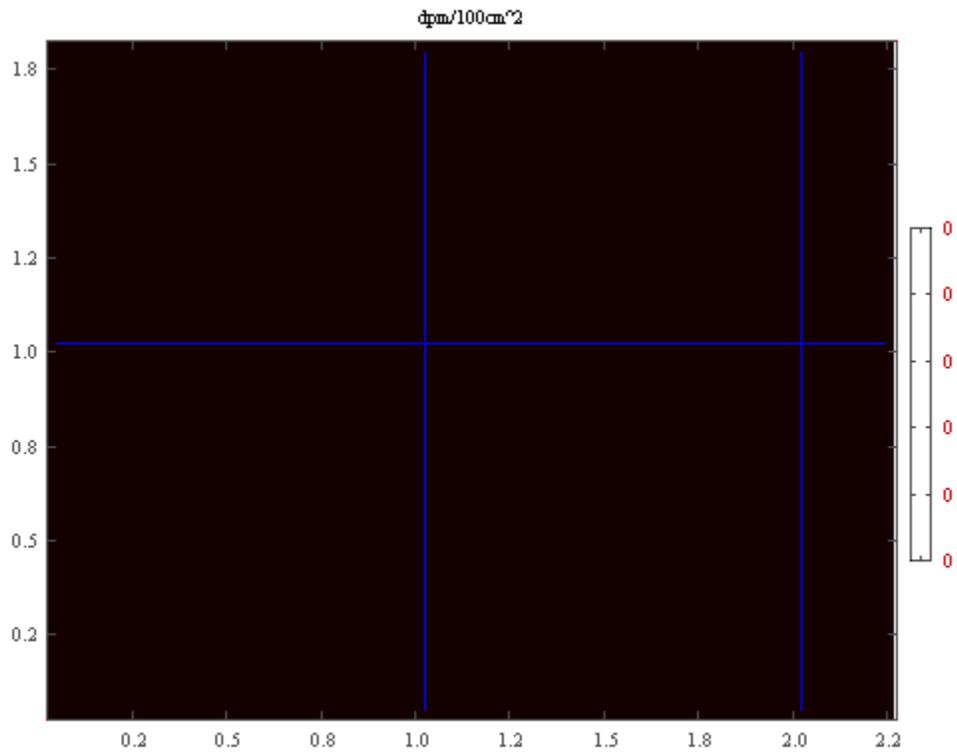


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1131B
Survey Date:	March 4, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

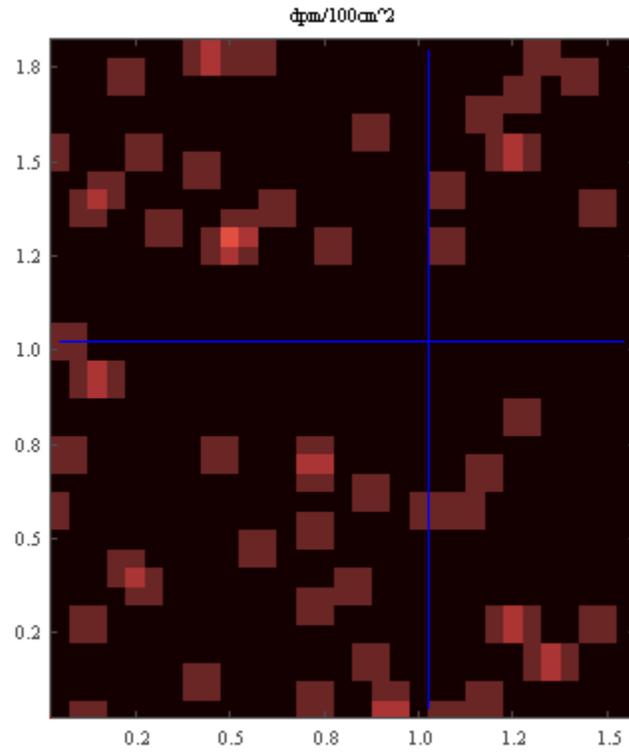


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

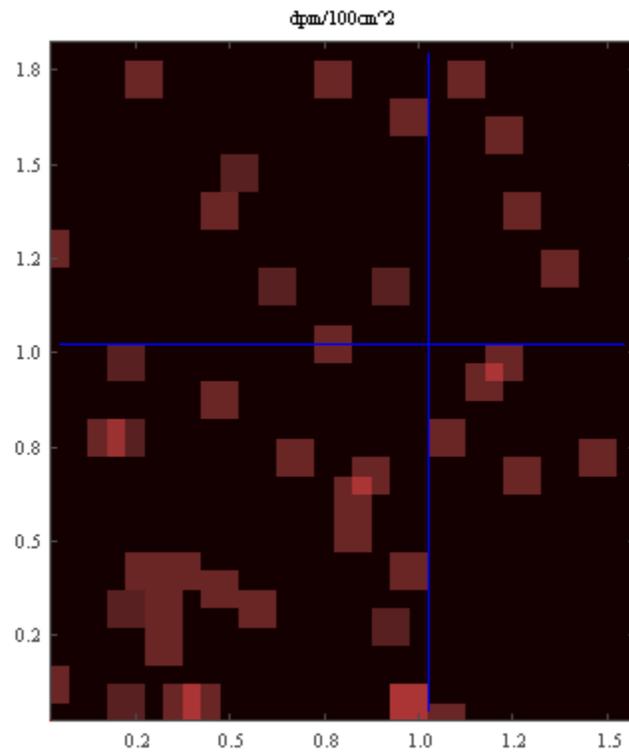


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

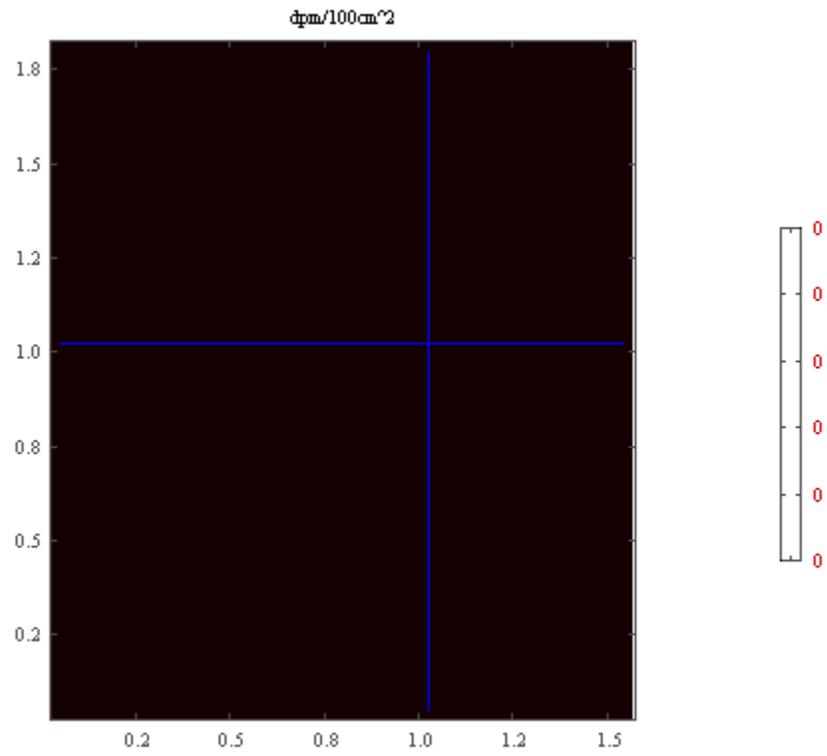


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1201A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	290 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.11 m ²

This survey is not position correlated.

Primary Detector:

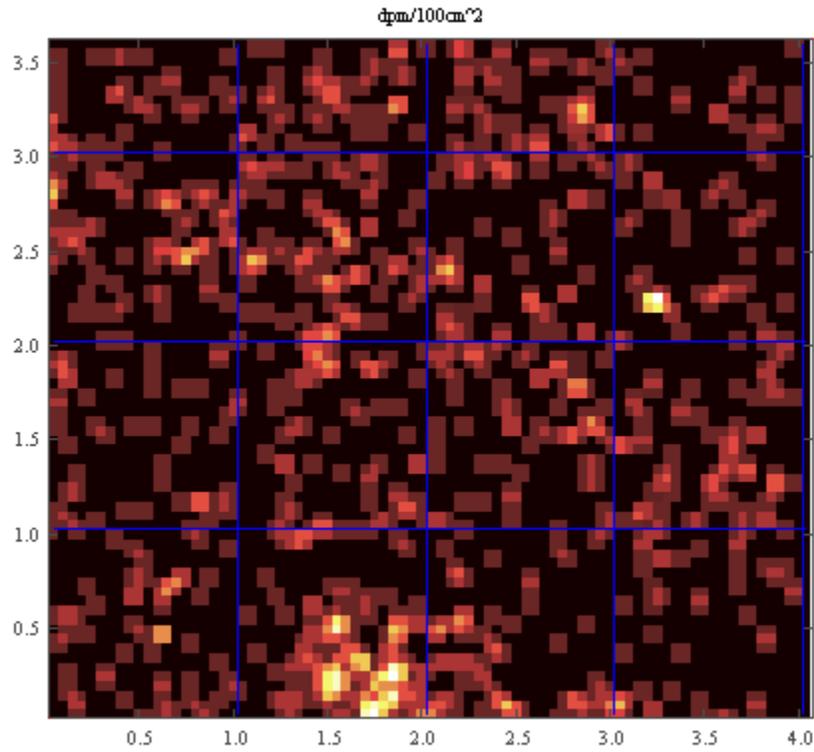


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

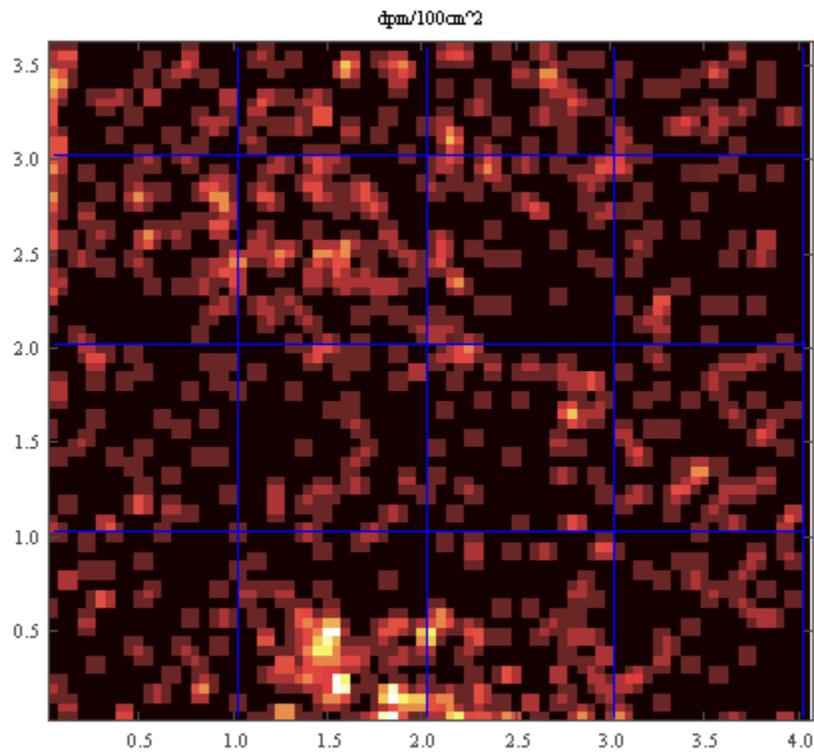


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

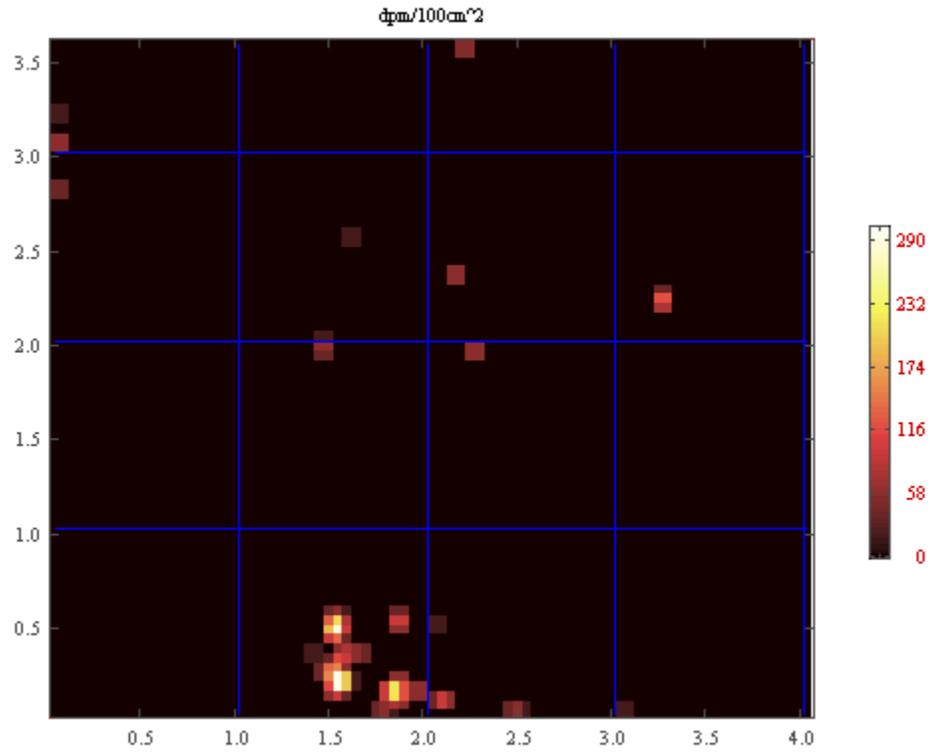


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

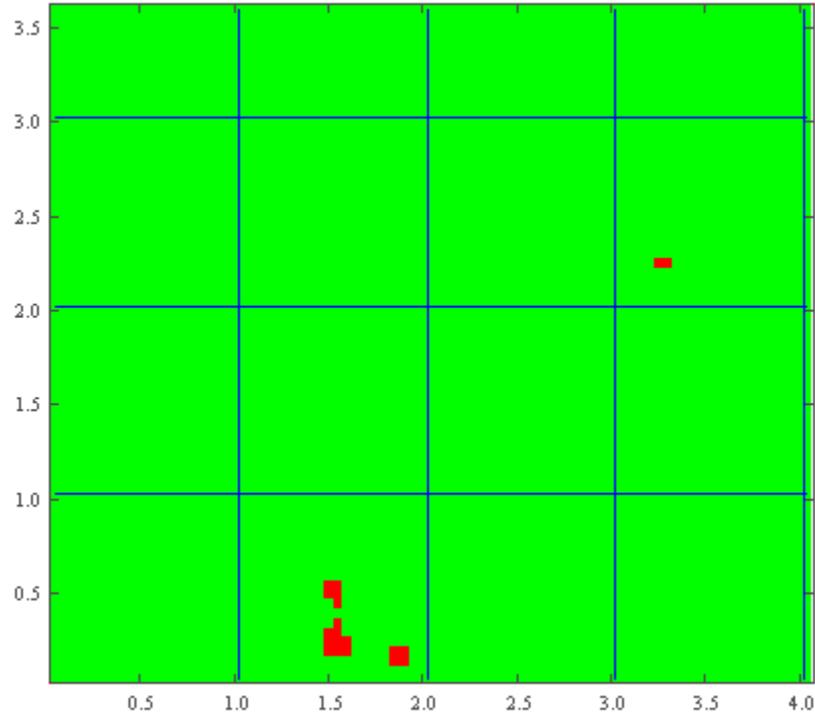


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	290	32	(155,20)	(0,15)	N/A		
Spot	284	32	(155,50)	(0,45)	N/A		
Spot	215	38	(185,15)	(0,10)	N/A		
Spot	117	146	(325,225)	(0,40)	N/A		
Spot	116	32	(155,35)	(0,30)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1211A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

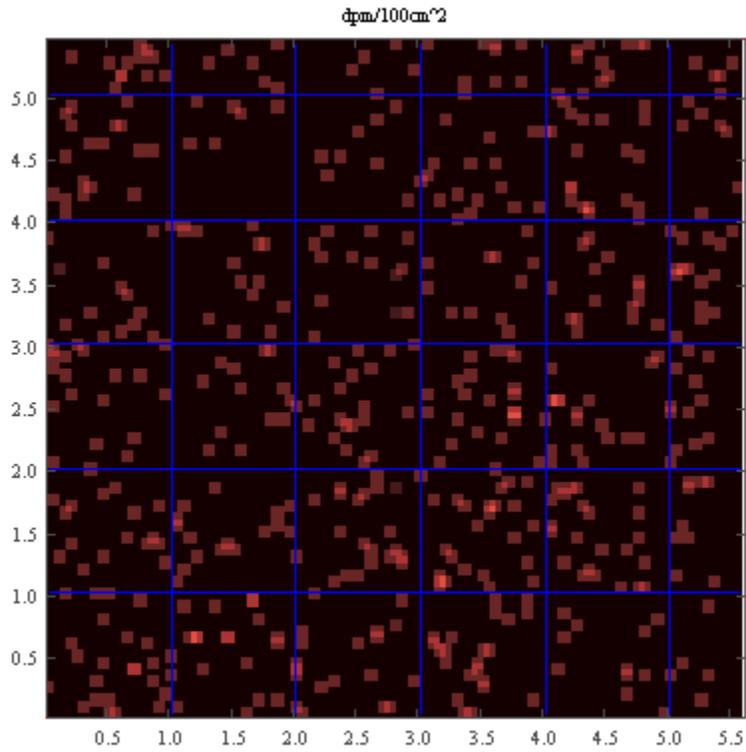


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

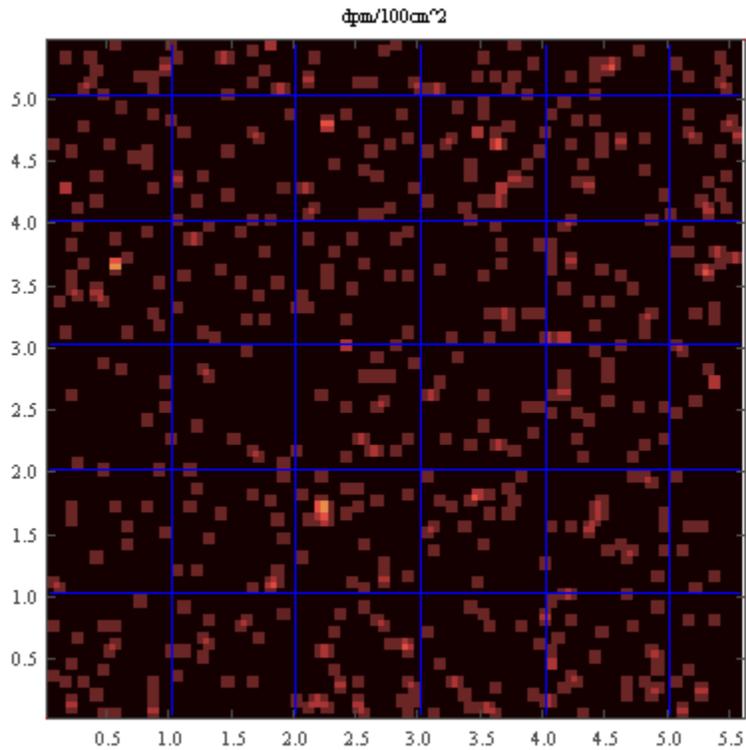


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

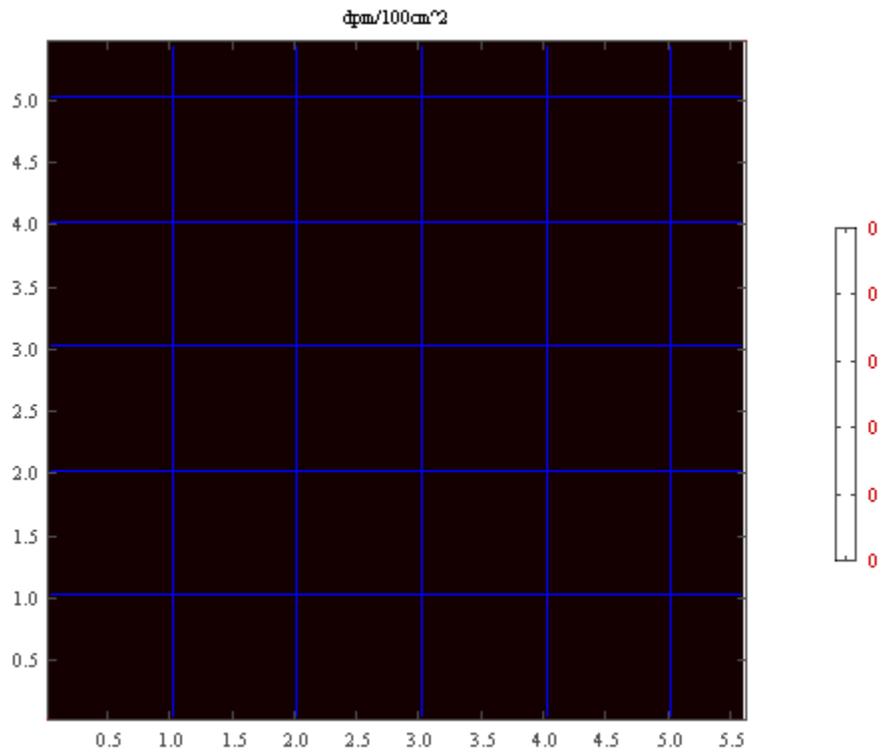


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1221A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

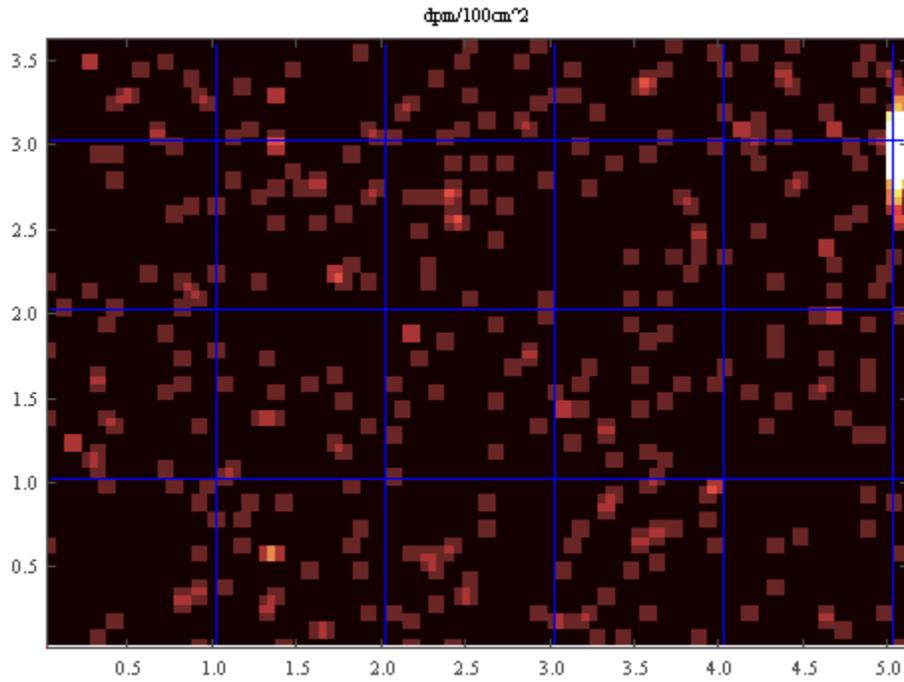


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

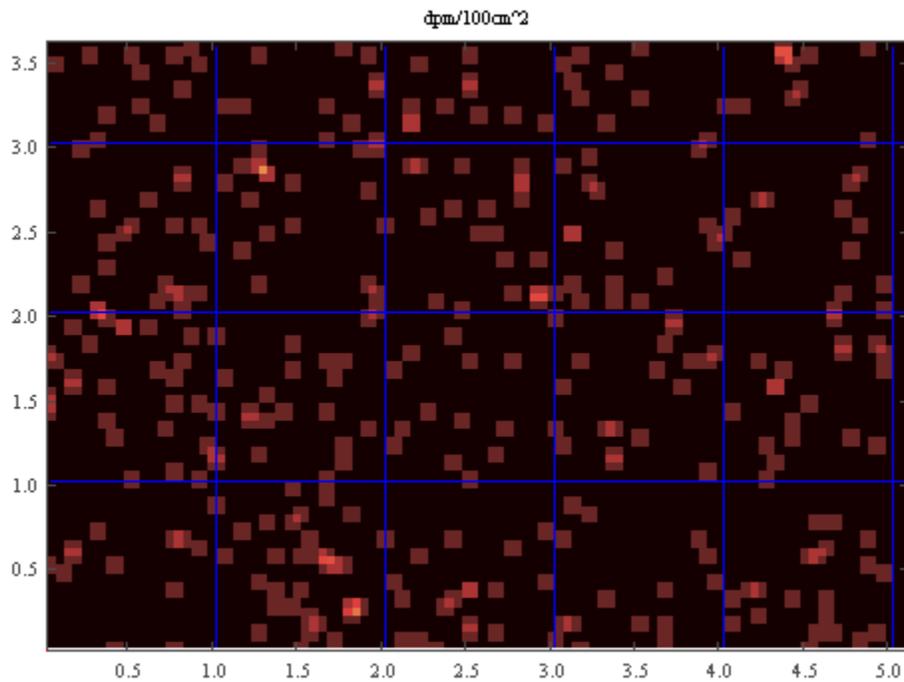


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

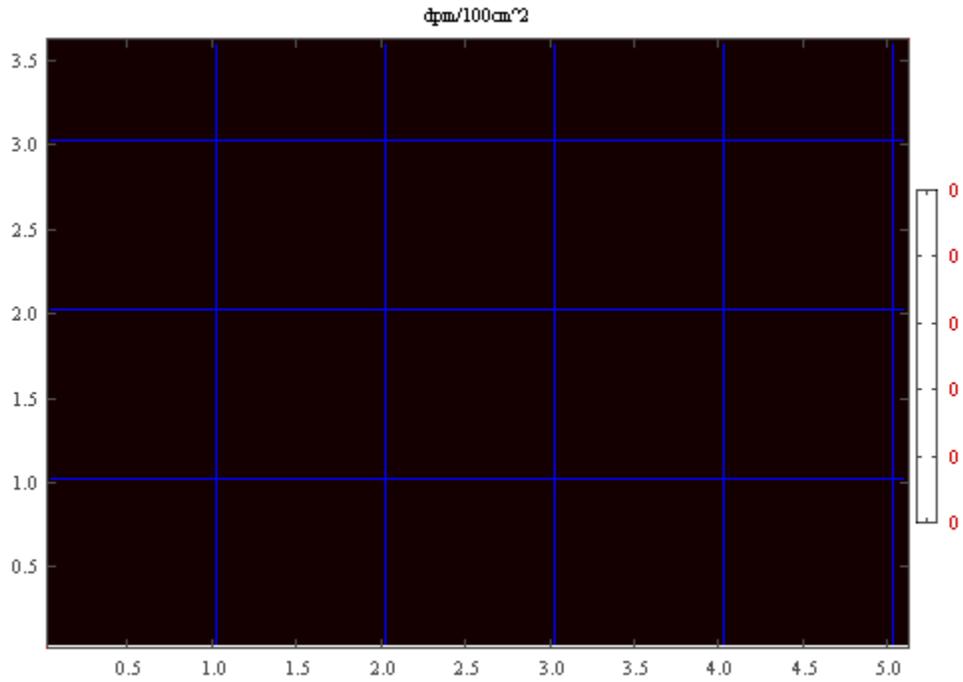


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1231A
Survey Date:	March 3, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

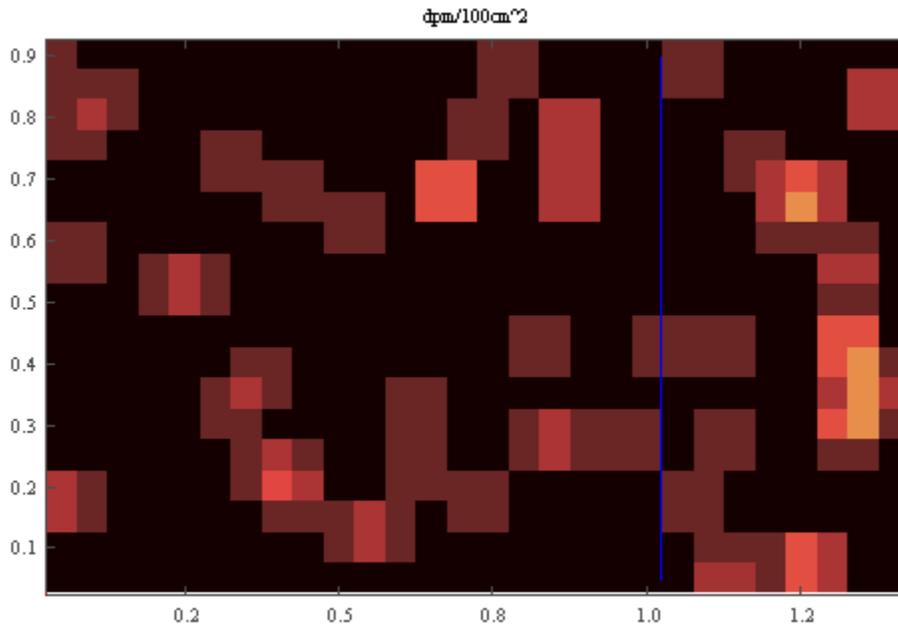


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

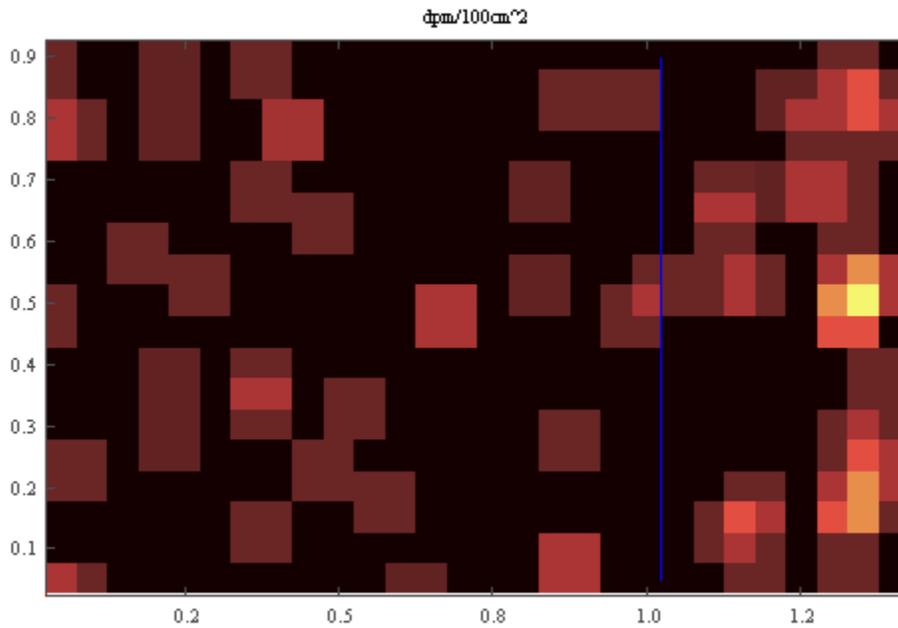


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

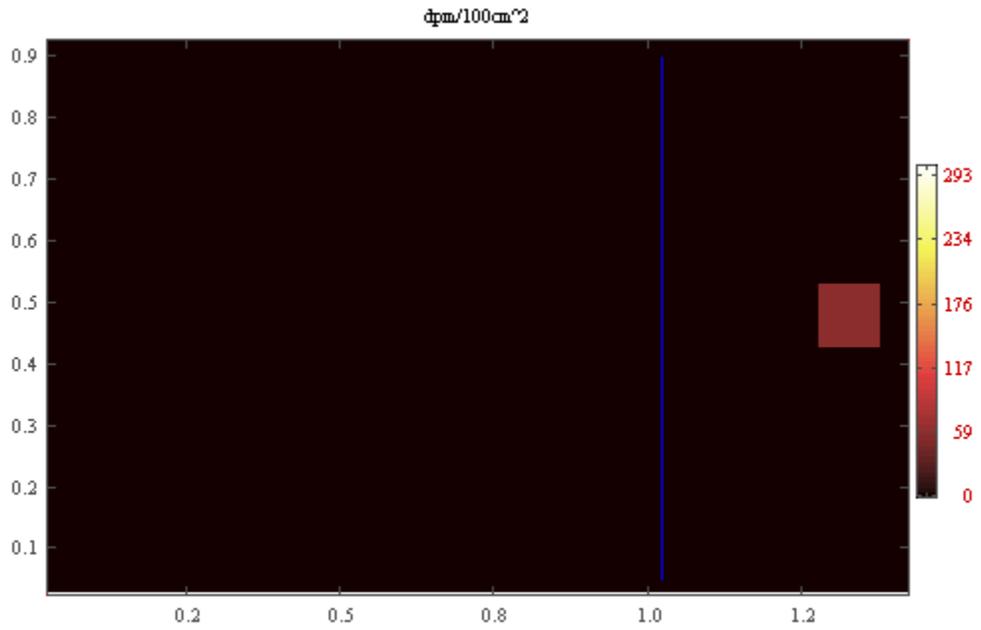


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1301A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

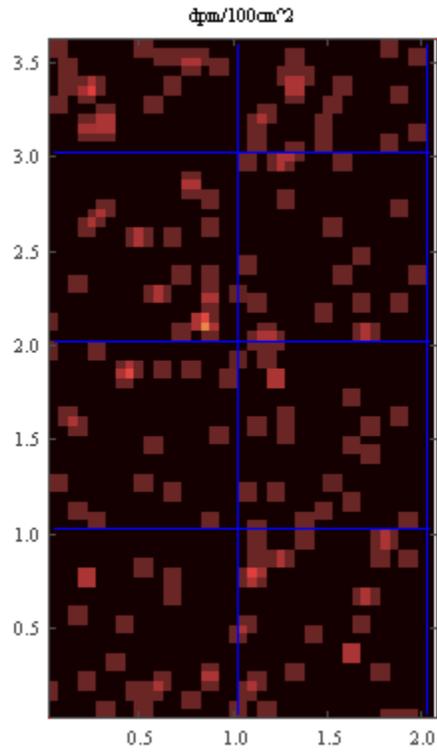


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

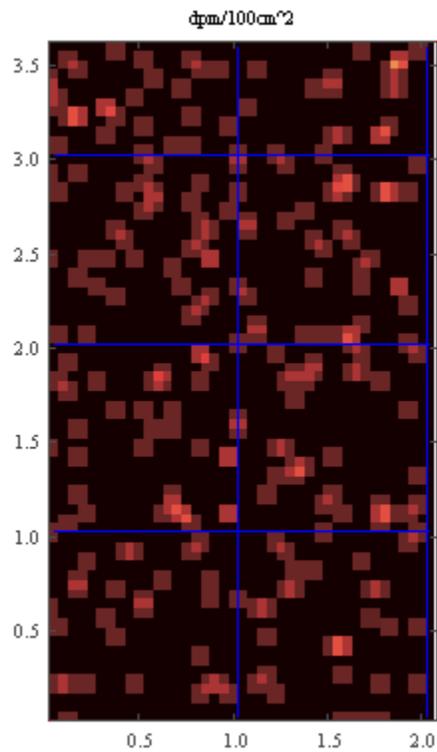


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

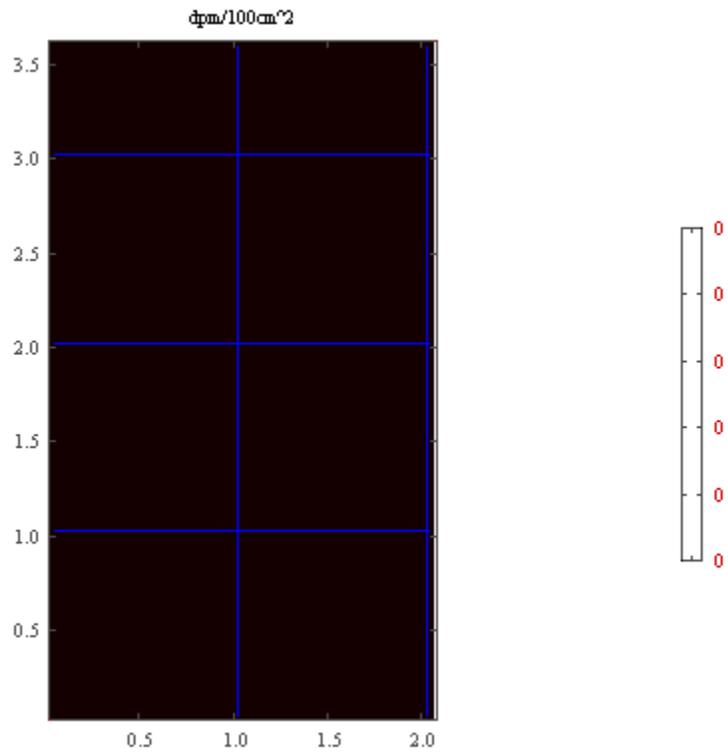


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1311A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

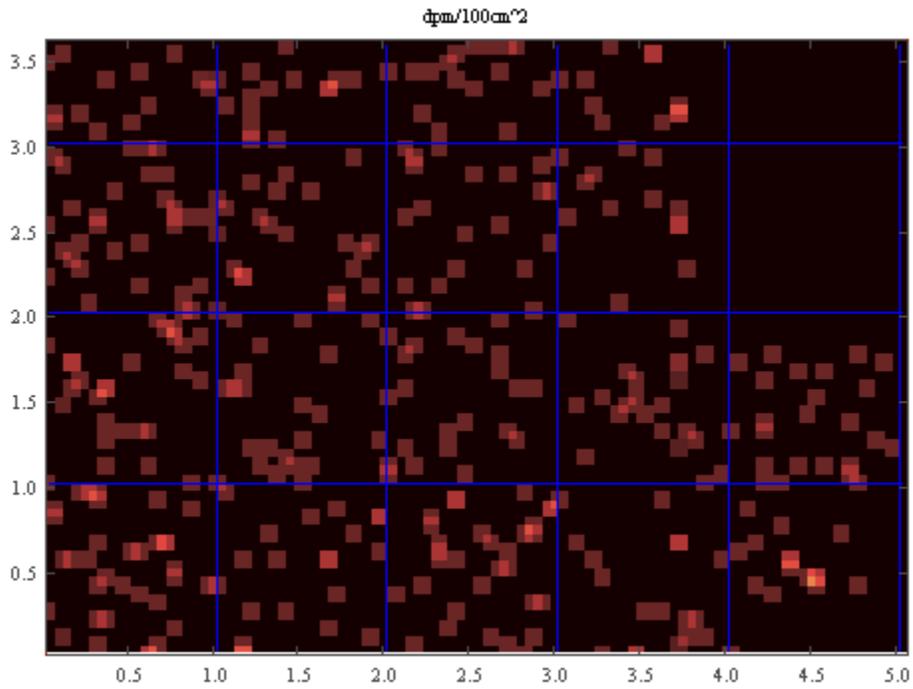


Figure 1: Meter Grid overlaid onto image plot of 100cm^2 areas..

Recount Detector:

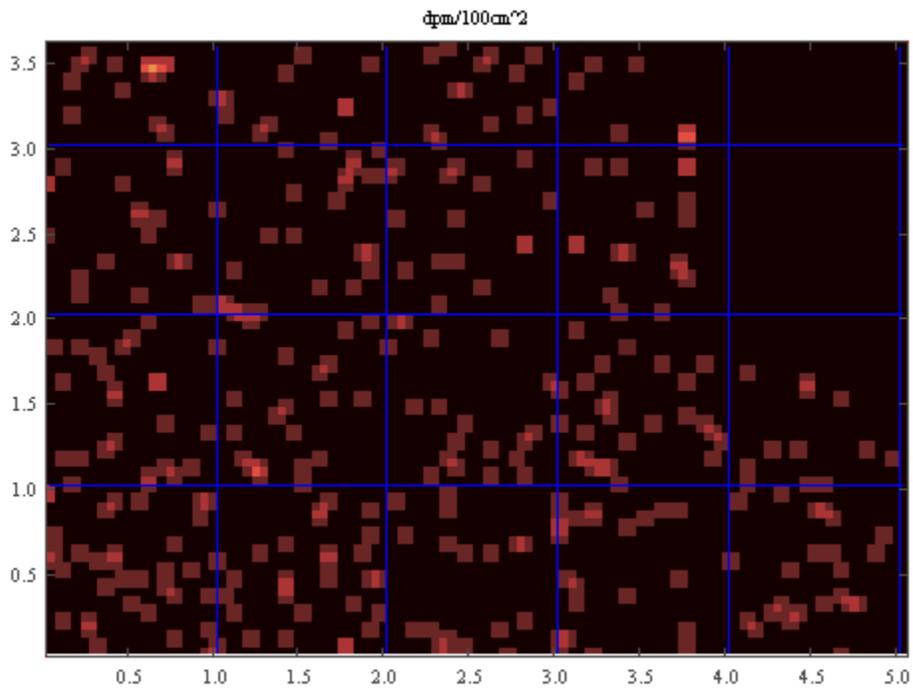


Figure 2: Meter Grid overlaid onto image plot of 100cm^2 areas..

Coincidence Logic:

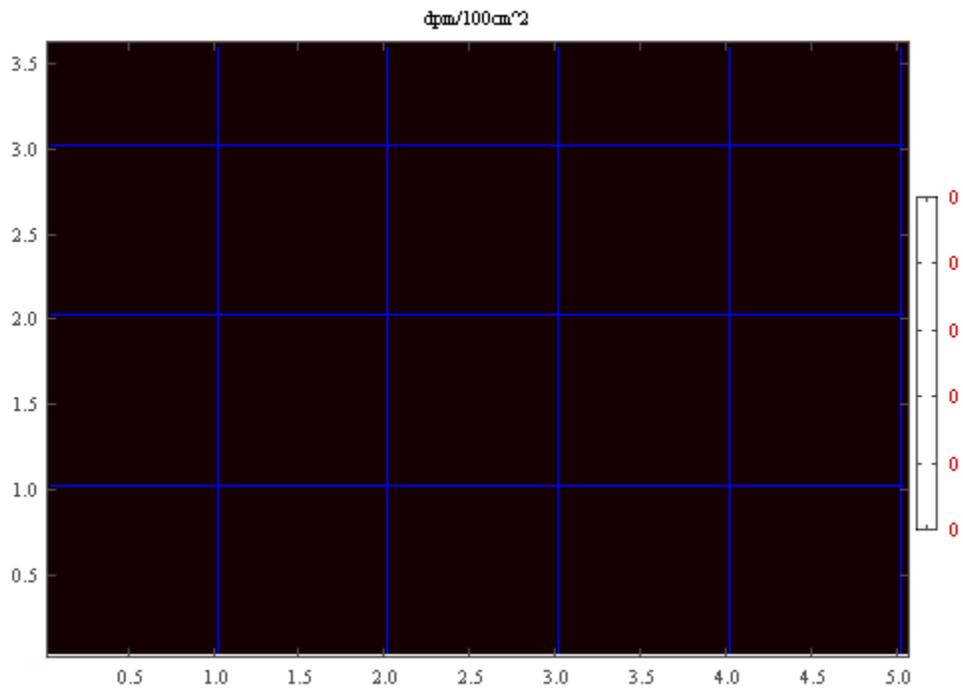


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1321A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

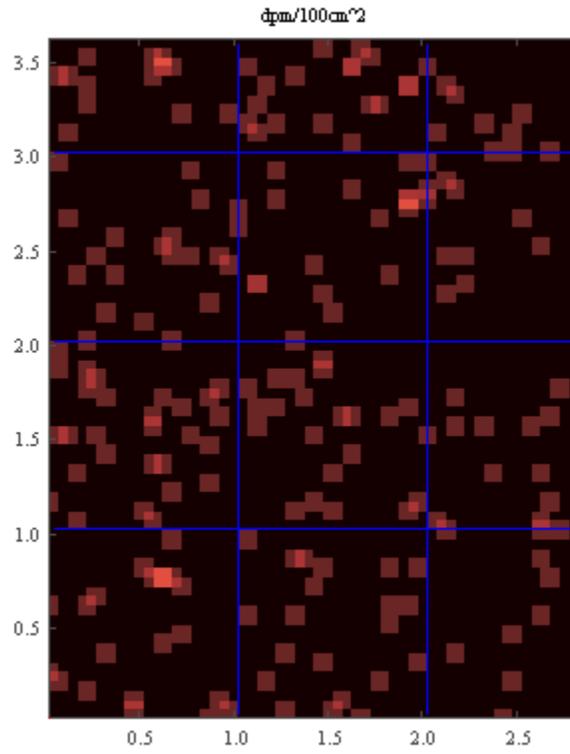


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

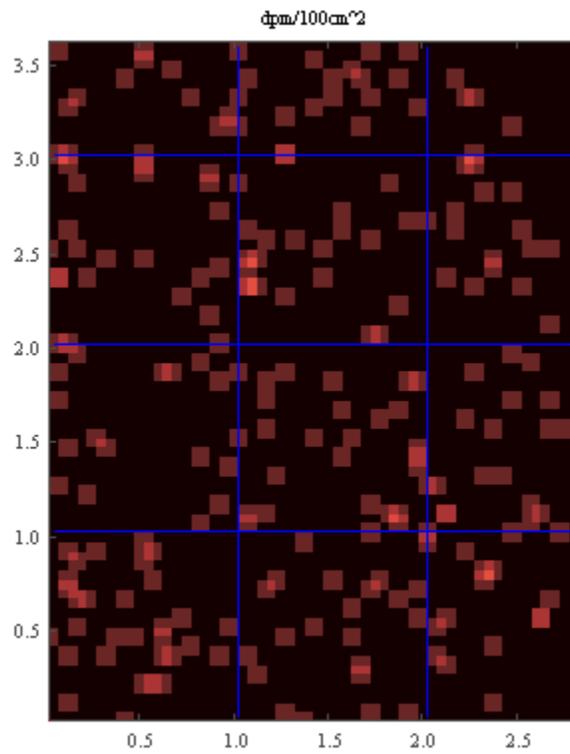


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

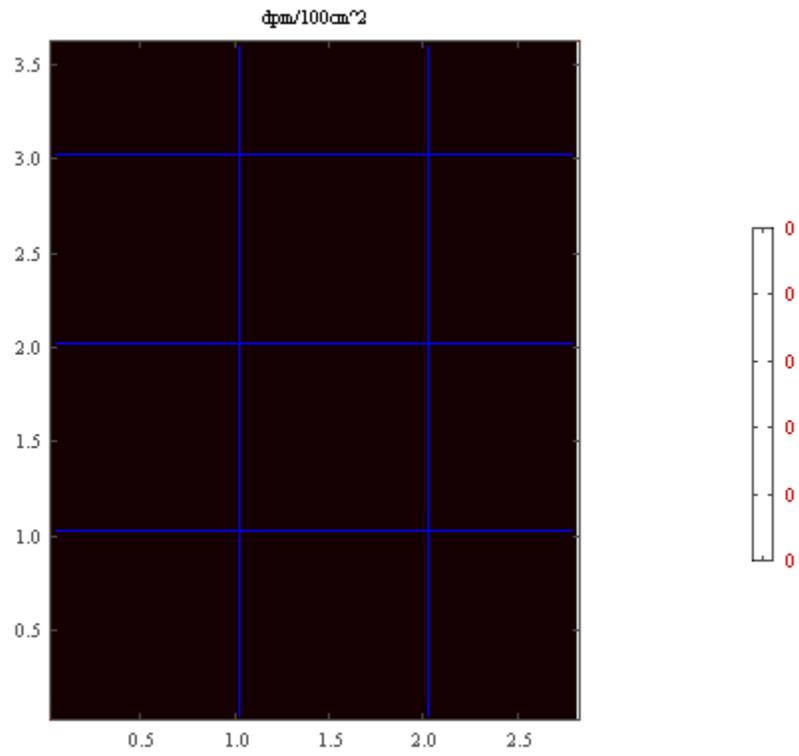


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1331A
Survey Date:	March 3, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

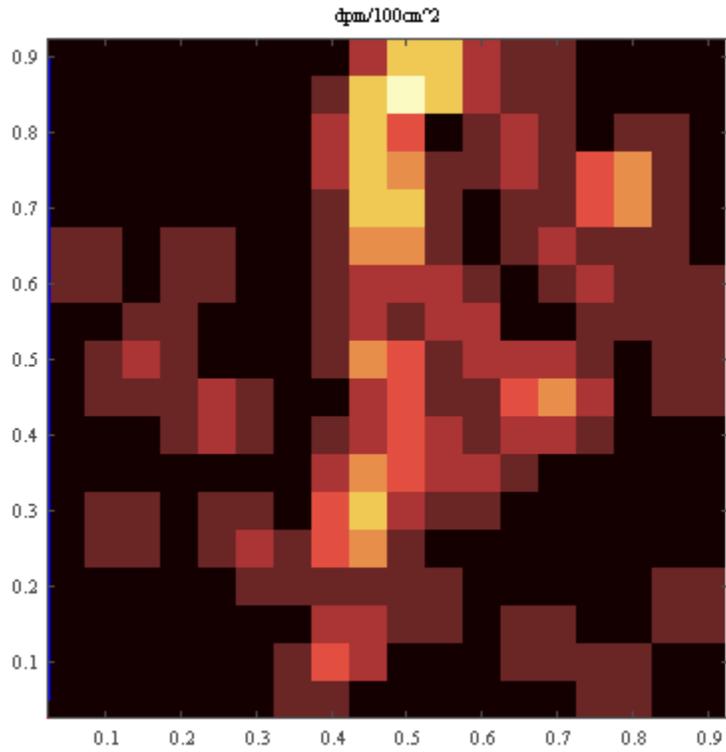


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

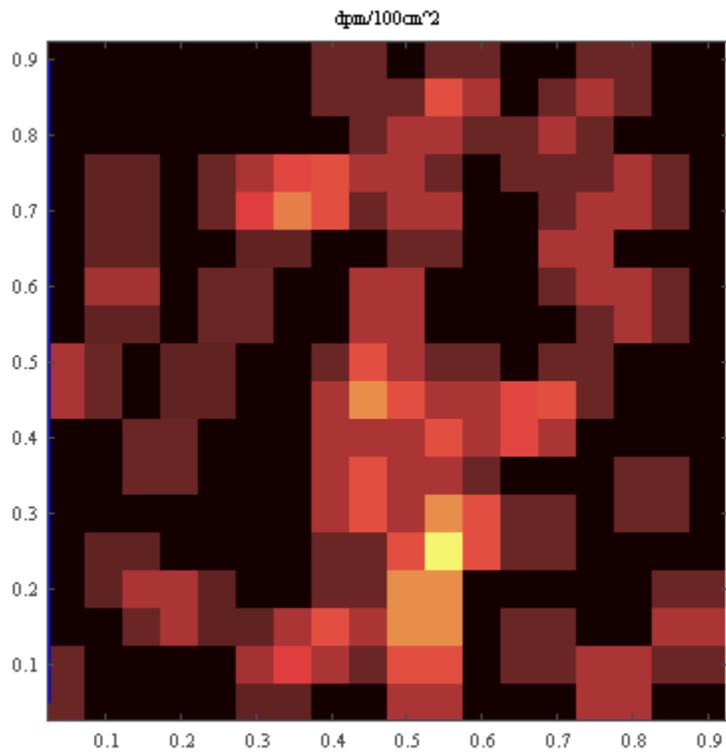


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

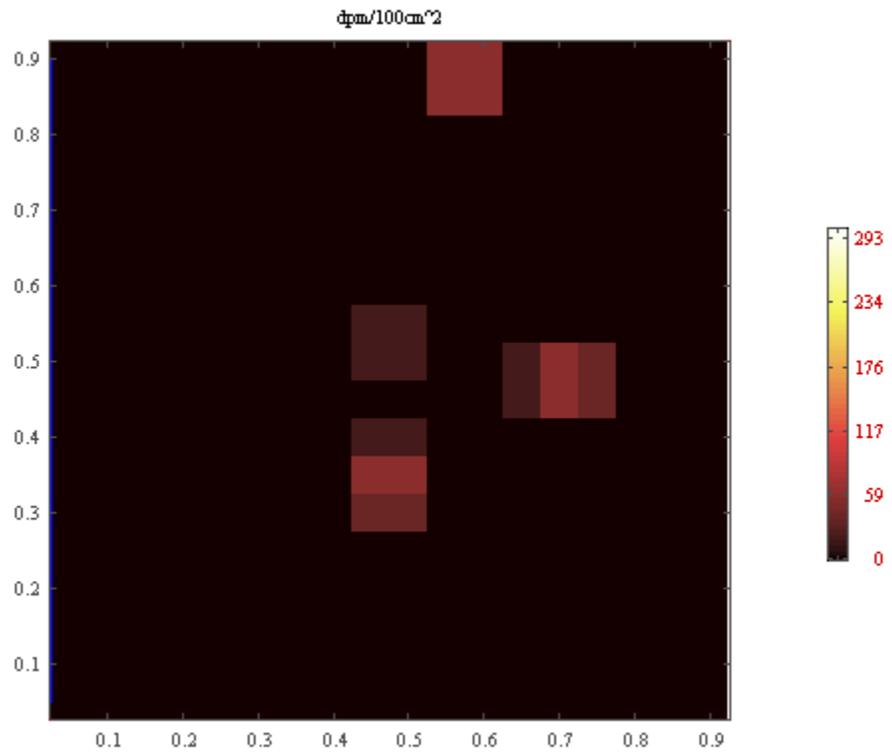


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1401A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

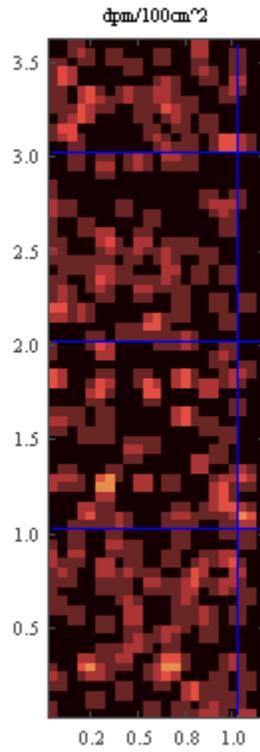


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

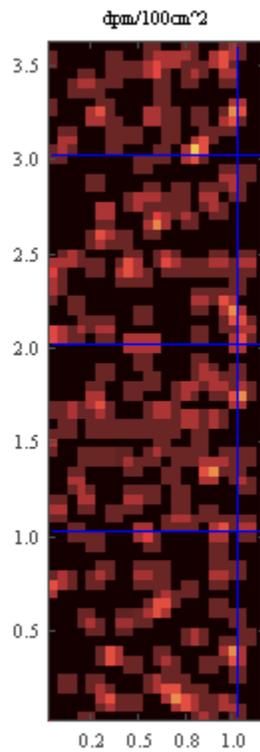


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

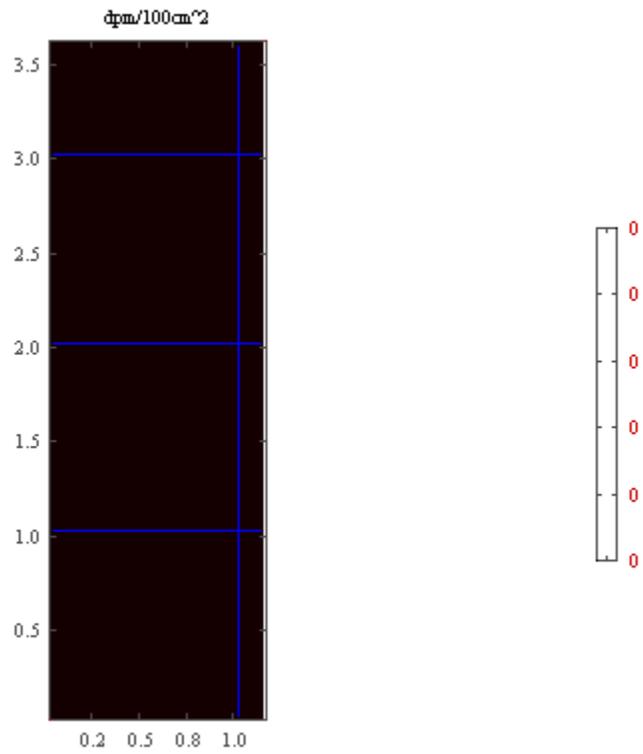


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1411A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

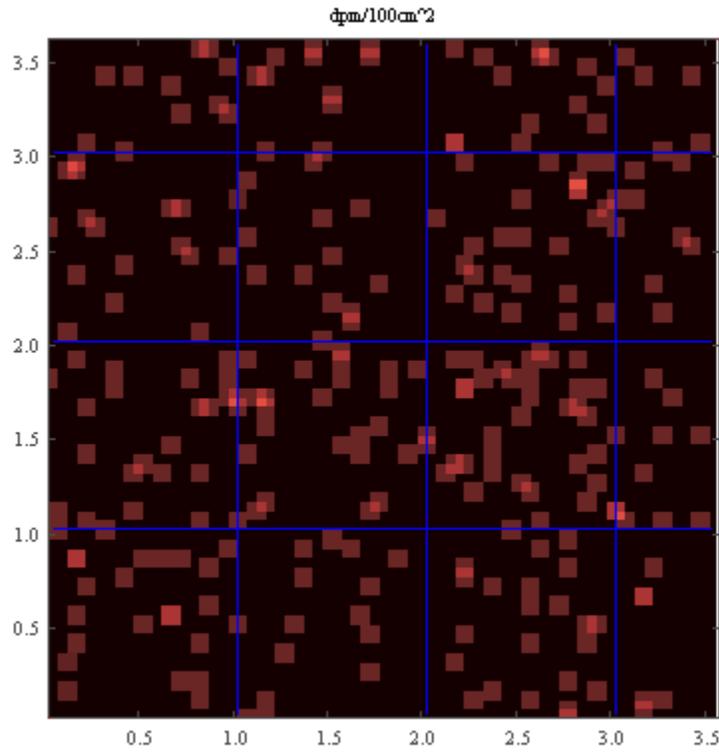


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

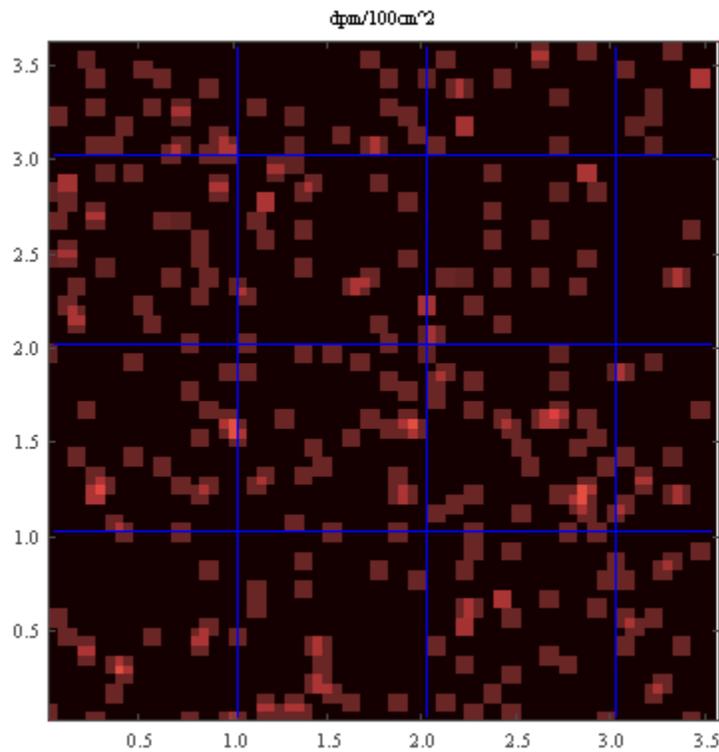


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

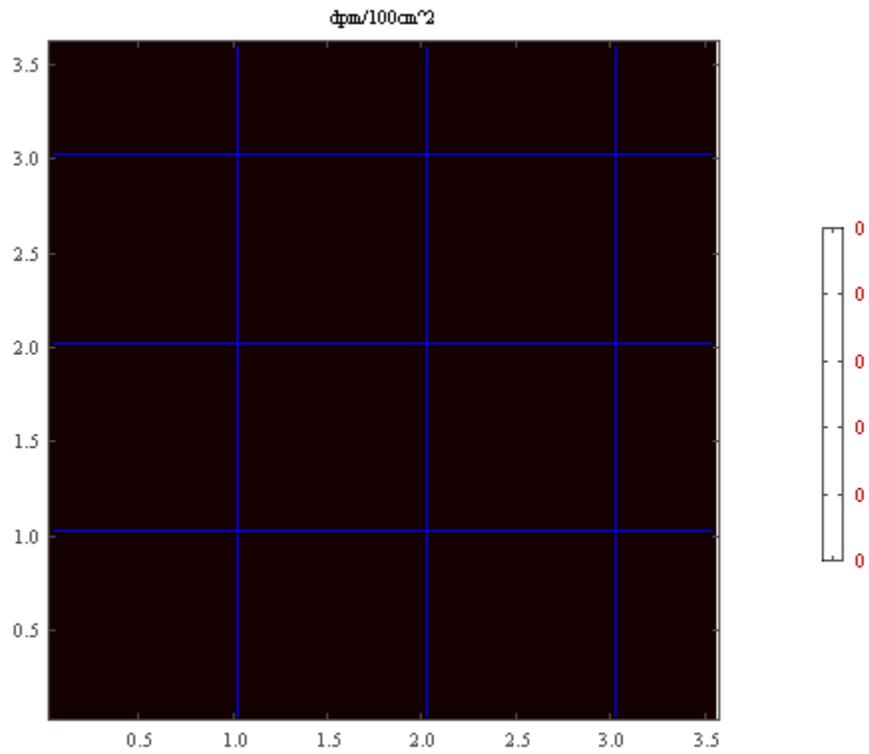


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1421A
Survey Date:	November 29, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

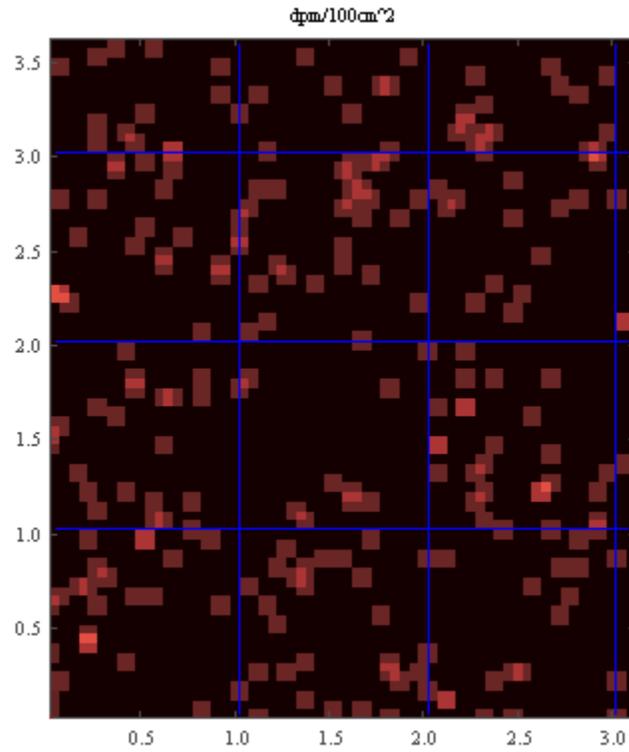


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

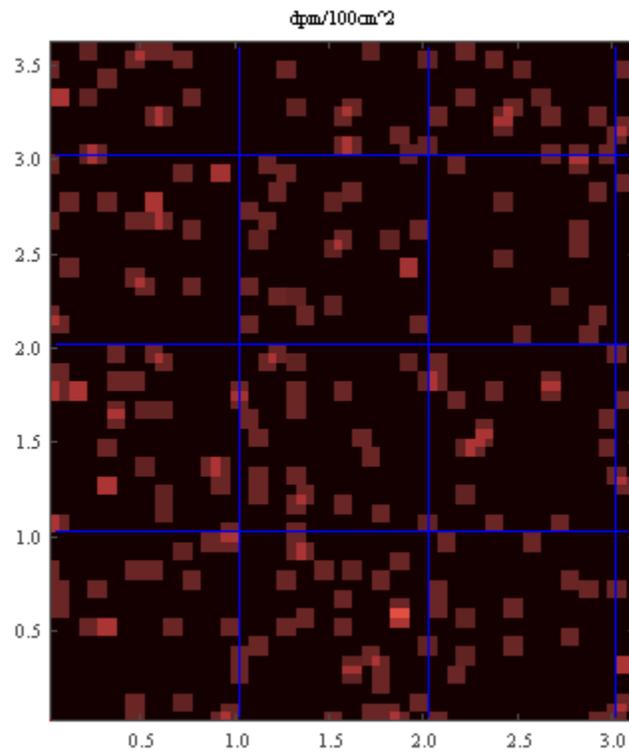


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

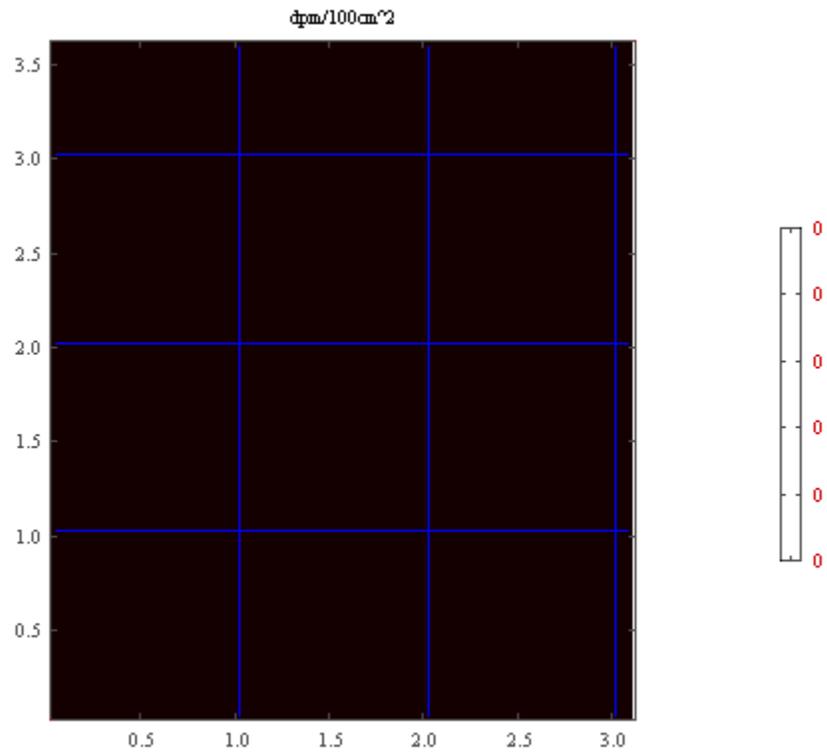


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1501A
Survey Date:	December 1, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

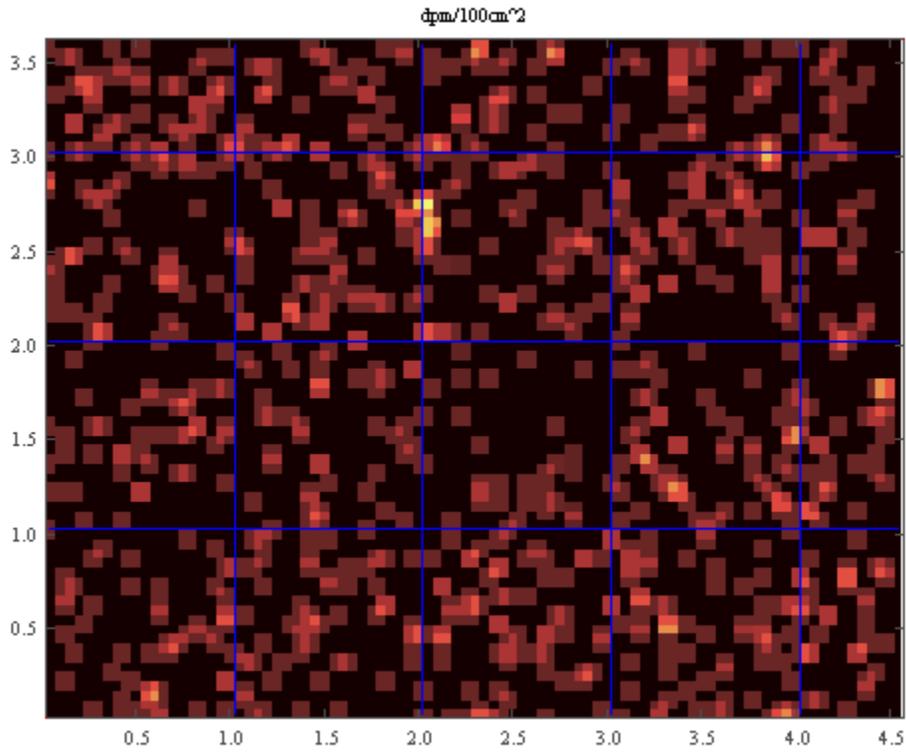


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

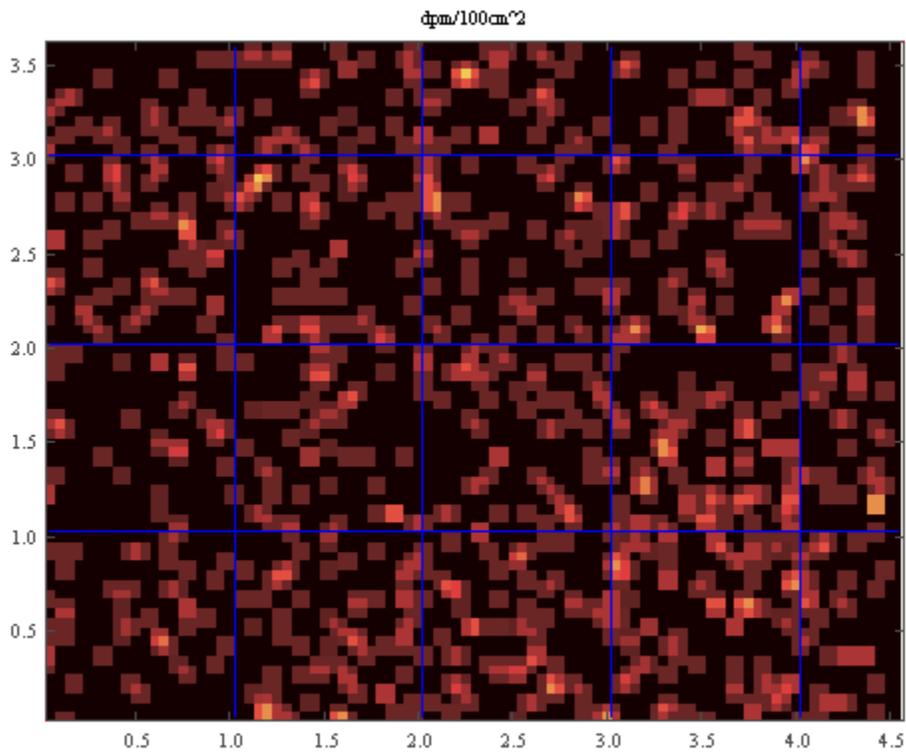


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

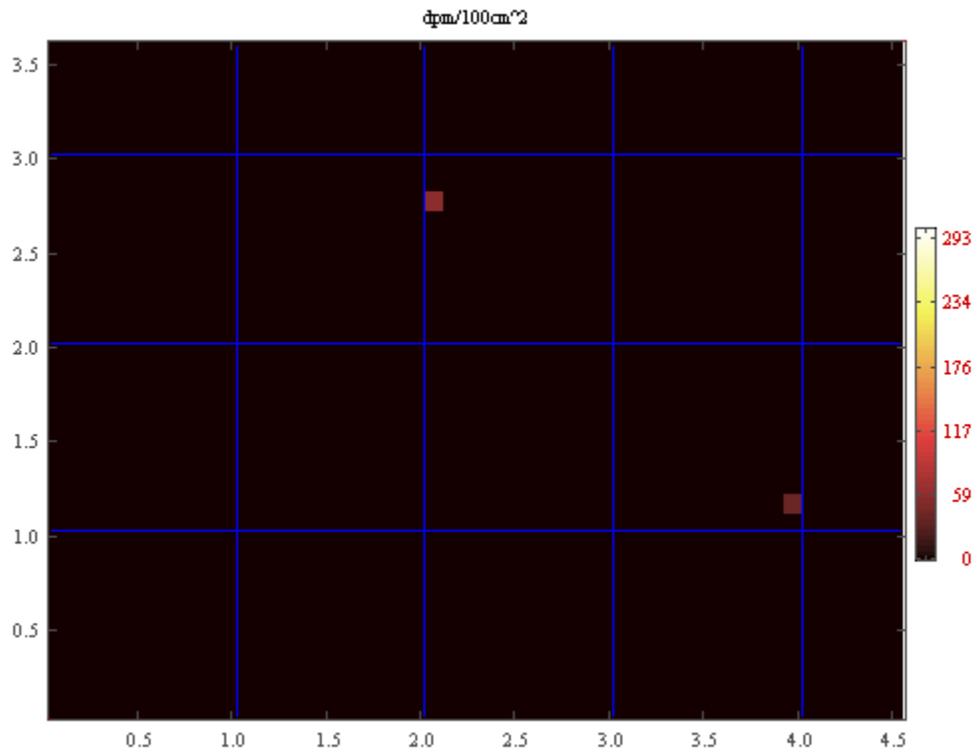


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1511A
Survey Date:	November 30, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

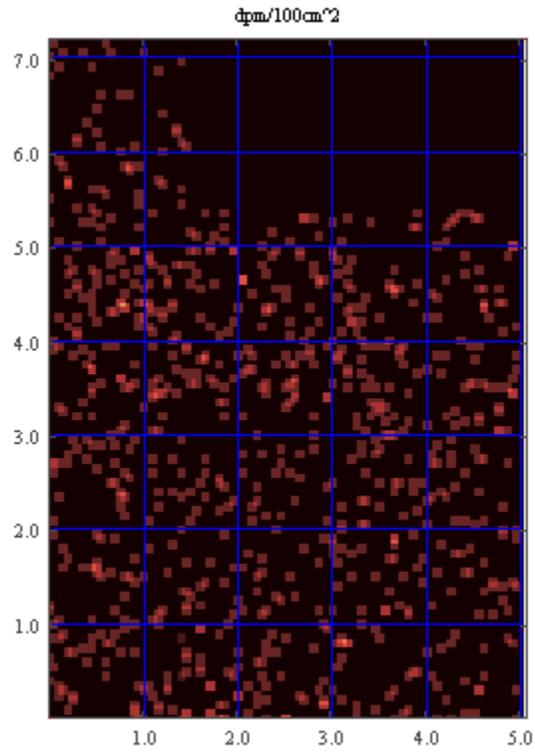


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

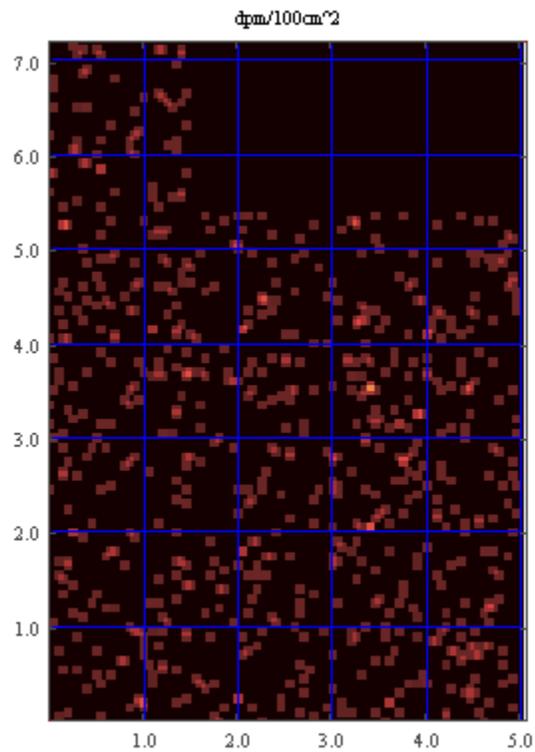


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

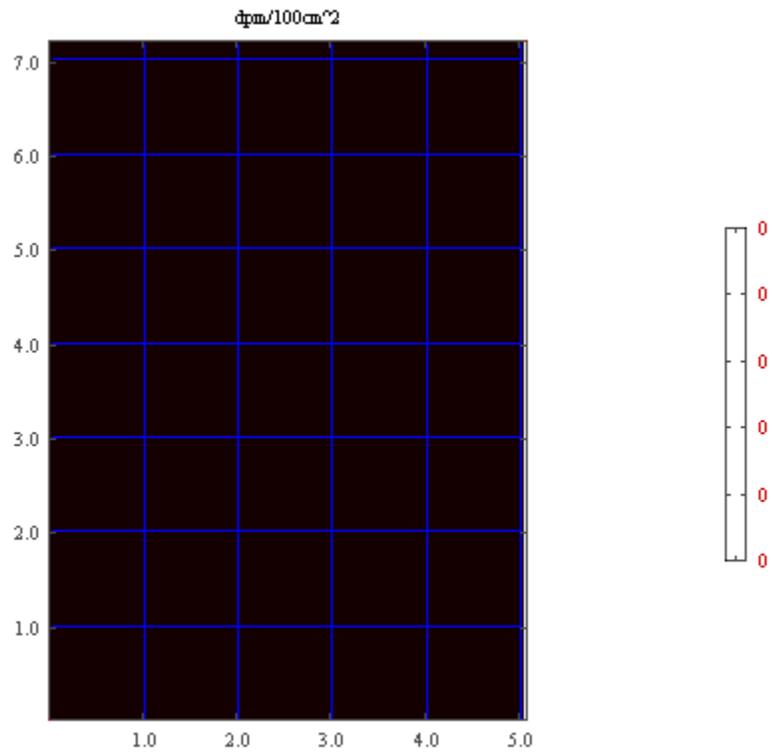


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1521A
Survey Date:	November 30, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

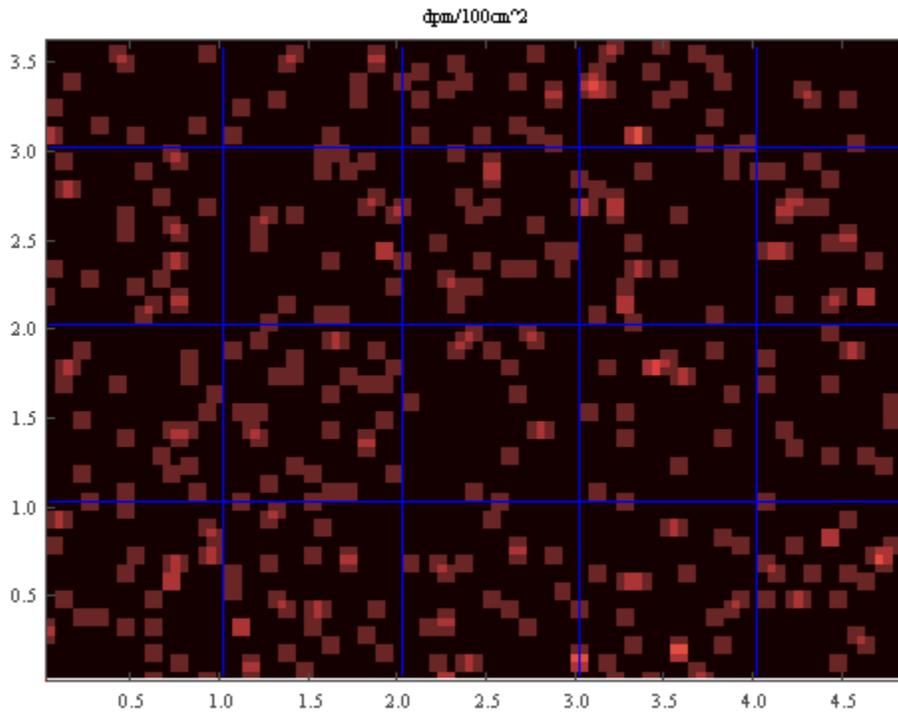


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

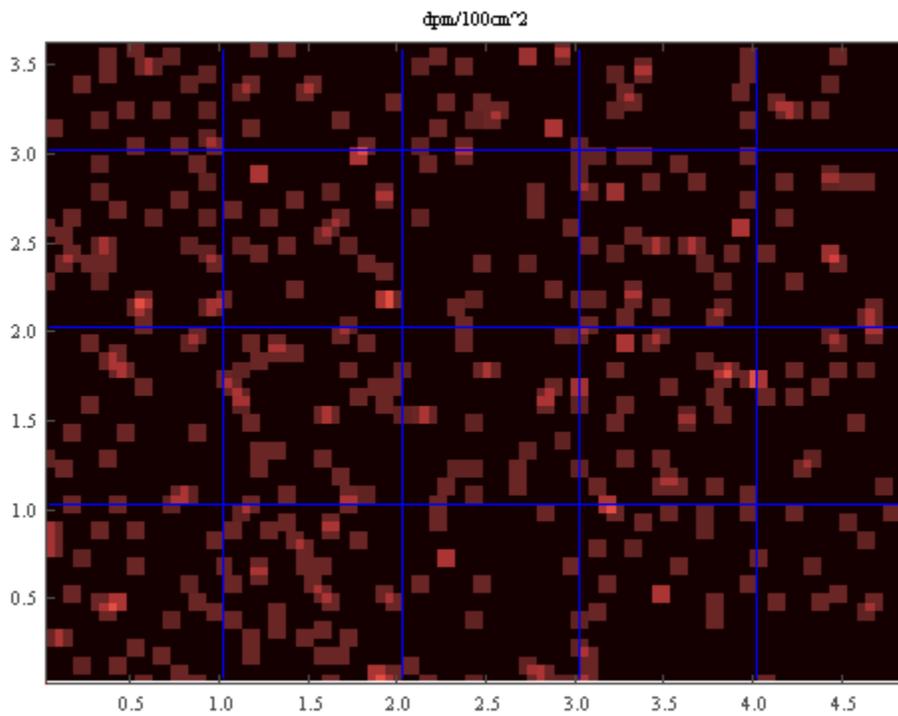


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

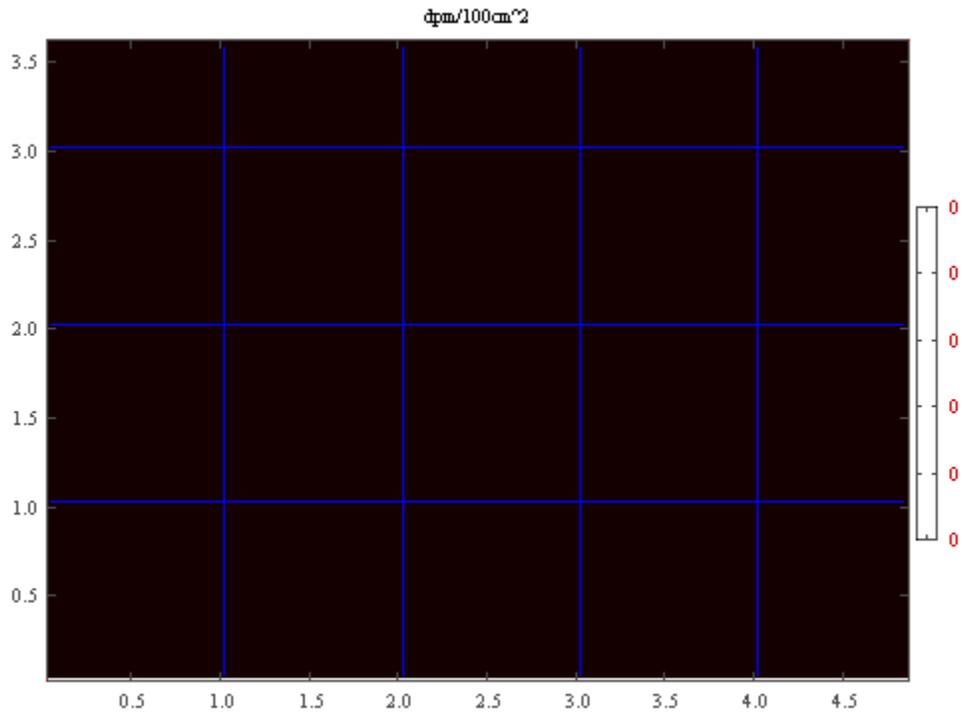


Figure 3: Meter Grid overlaid onto image plot of 100cm^2 areas. The color scale is in dpm per 100cm^2 .

Survey Report

Survey File Name:	FA1531A
Survey Date:	March 3, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

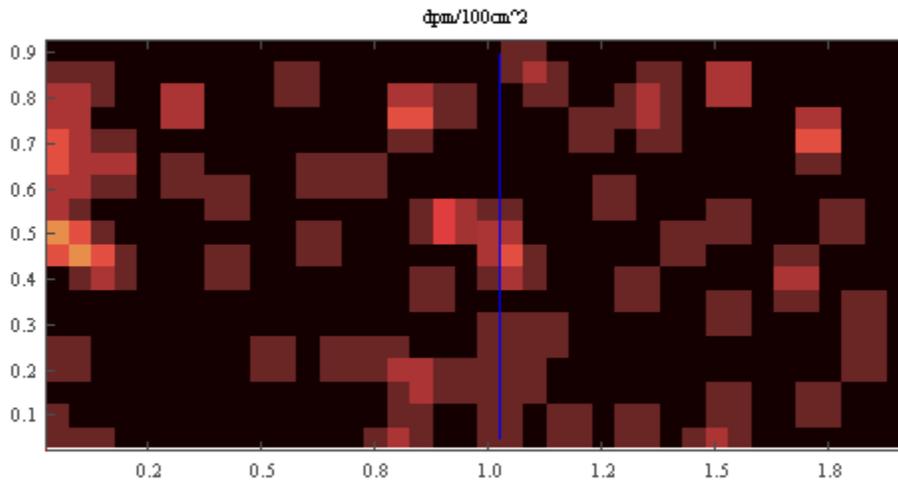


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

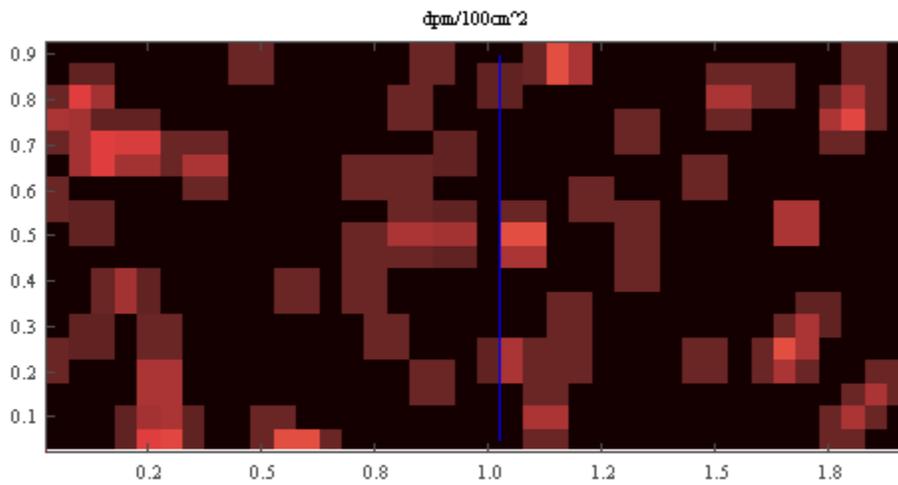


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

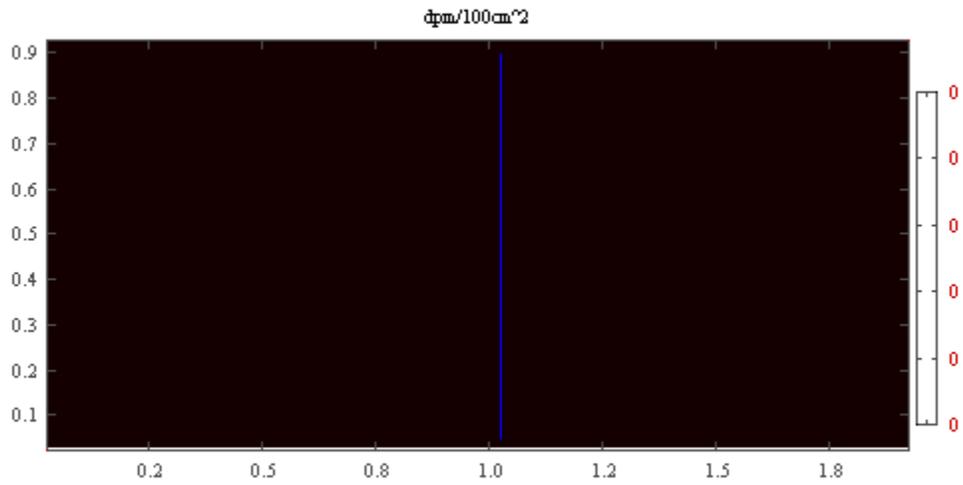


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1601A
Survey Date:	November 30, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	760 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.56 m ²

This survey is not position correlated.

Primary Detector:

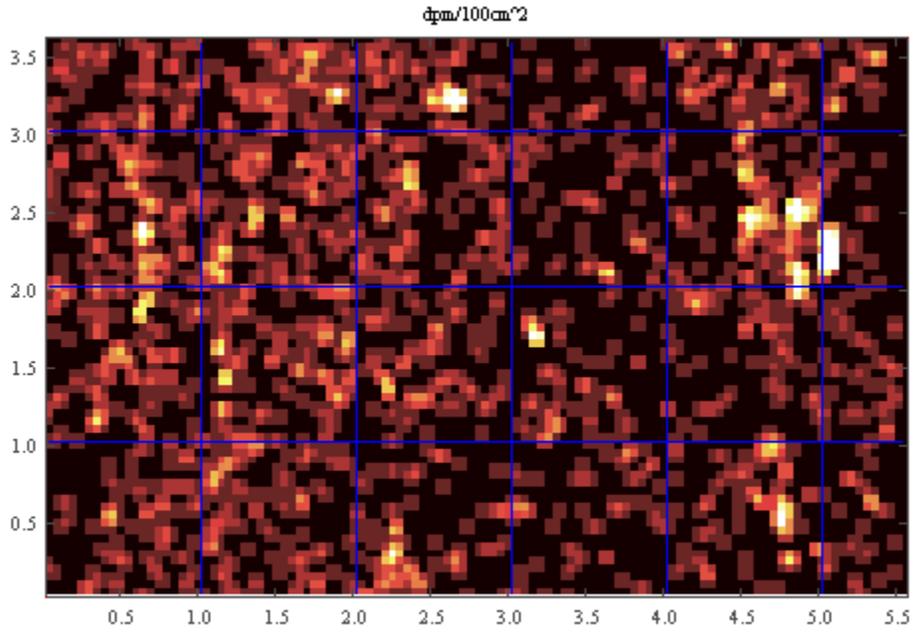


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

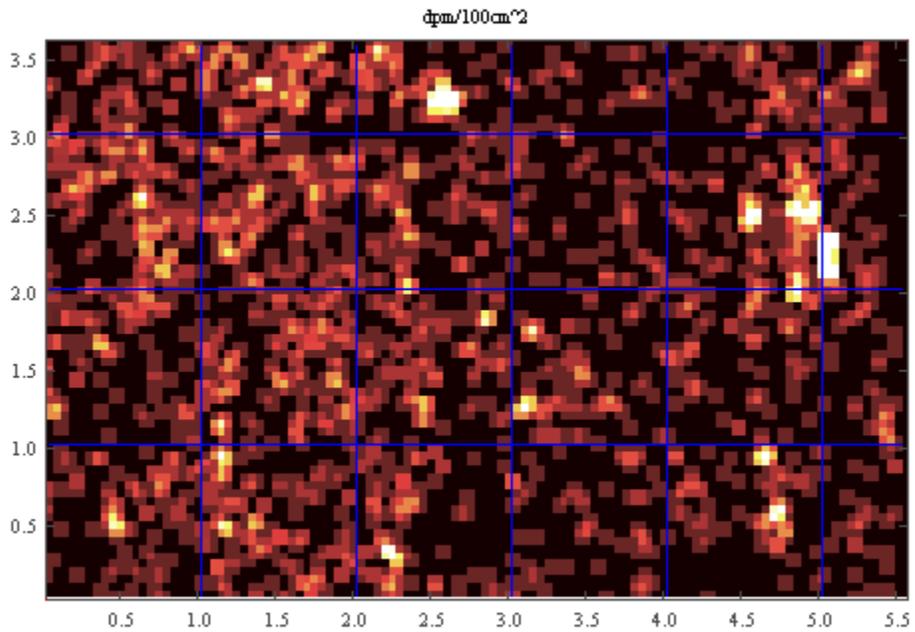


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

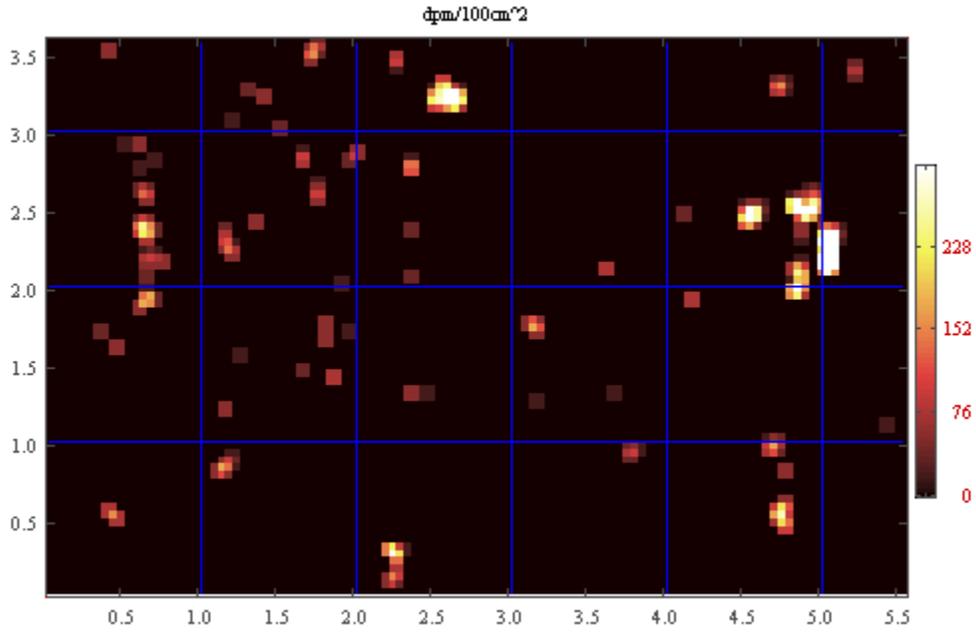


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

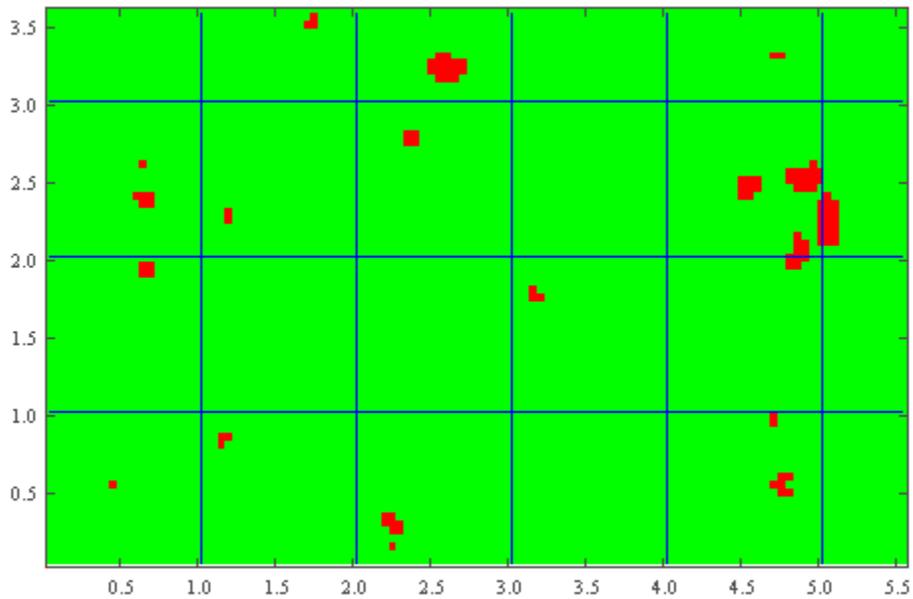


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	760	212	(505,215)	(0,30)	N/A		
Spot	701	212	(505,230)	(0,45)	N/A		
Spot	532	164	(265,320)	(0,135)	N/A		
Spot	448	202	(455,245)	(0,60)	N/A		
Spot	369	208	(485,250)	(0,65)	N/A		
Spot	342	46	(225,30)	(0,25)	N/A		
Spot	333	208	(485,200)	(0,15)	N/A		
Spot	267	96	(475,55)	(0,50)	N/A		
Spot	249	124	(65,240)	(0,55)	N/A		
Spot	230	160	(250,320)	(5,135)	N/A		
Spot	176	210	(500,255)	(5,70)	N/A		
Spot	176	124	(70,195)	(5,10)	N/A		
Spot	176	64	(315,175)	(0,170)	N/A		
Spot	174	24	(115,85)	(0,80)	N/A		
Spot	170	208	(485,215)	(0,30)	N/A		
Spot	169	94	(470,100)	(5,95)	N/A		
Spot	156	10	(45,55)	(0,50)	N/A		
Spot	156	146	(175,350)	(0,165)	N/A		
Spot	156	206	(475,330)	(0,145)	N/A		
Spot	153	46	(225,15)	(0,10)	N/A		
Spot	137	134	(120,225)	(5,40)	N/A		
Spot	137	158	(235,280)	(0,95)	N/A		
Spot	133	124	(65,260)	(0,75)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1611A
Survey Date:	November 30, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	1,360 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.61 m ²

This survey is not position correlated.

Primary Detector:

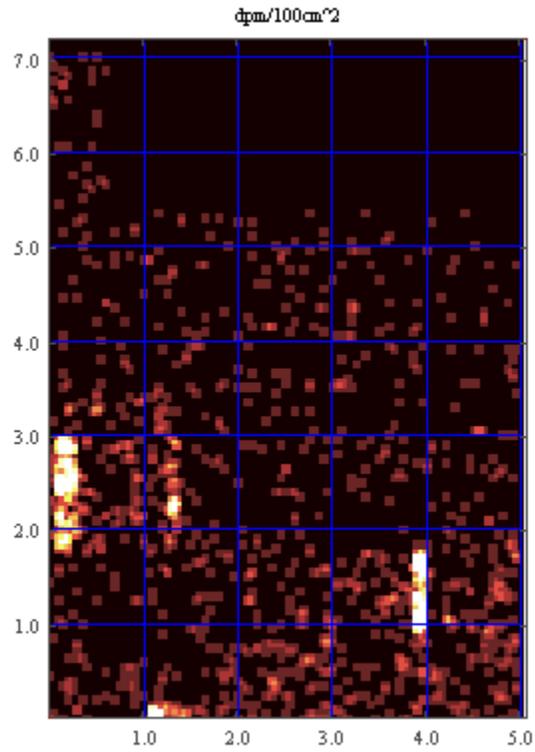


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

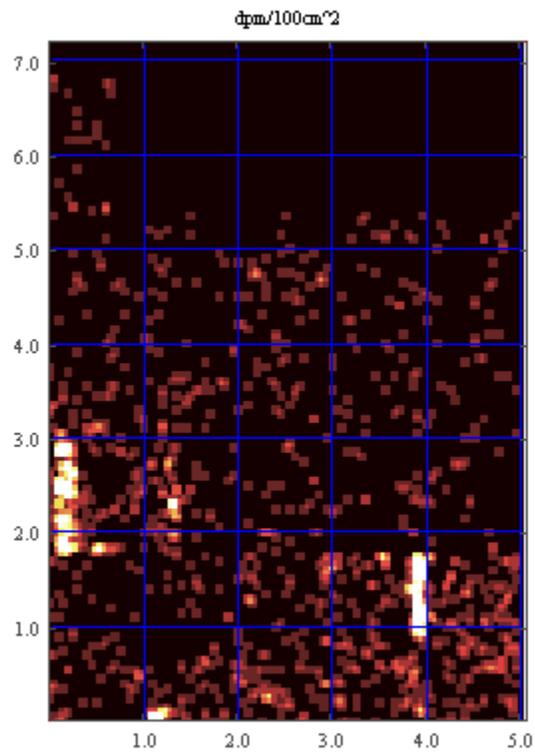


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

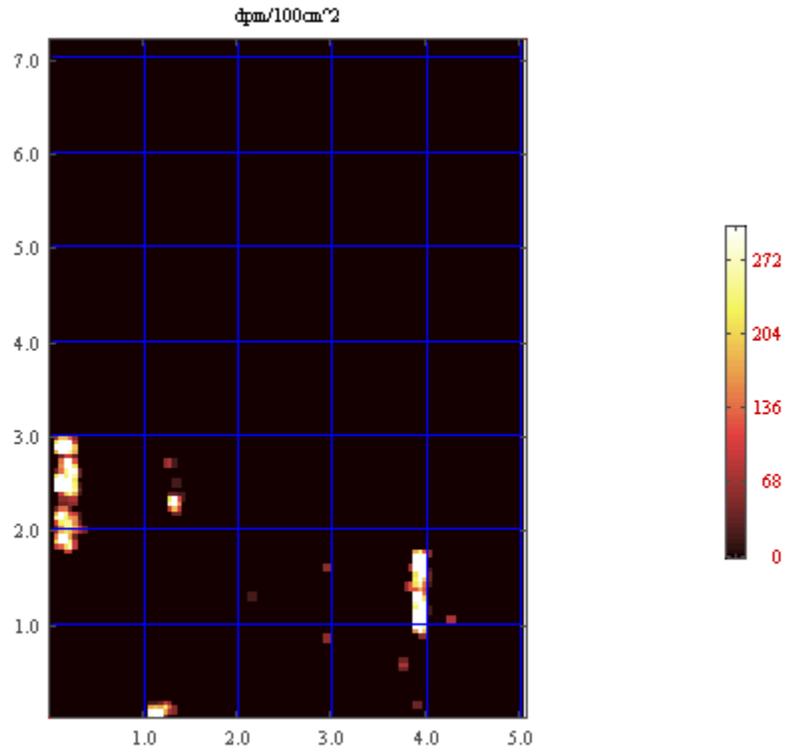


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

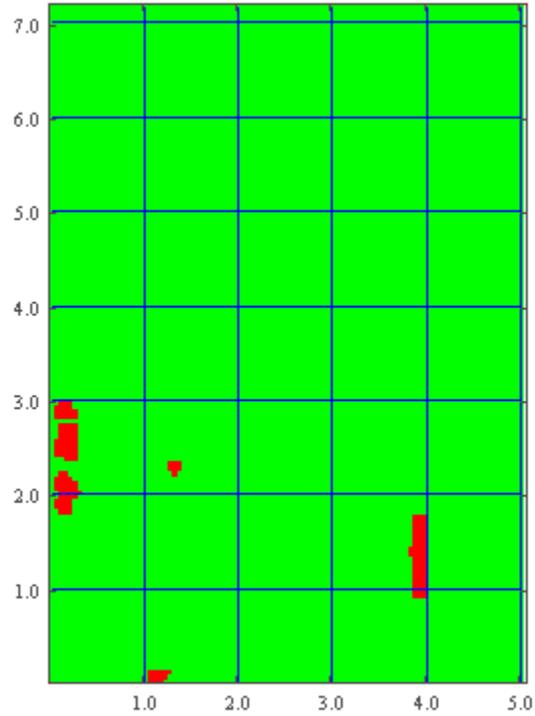


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	1360	104	(15,250)	(0,65)	N/A		
Spot	1326	80	(395,165)	(0,160)	N/A		
Spot	1190	80	(395,110)	(0,105)	N/A		
Spot	806	104	(15,290)	(0,105)	N/A		
Spot	757	24	(115,10)	(0,5)	N/A		
Spot	663	80	(395,130)	(0,125)	N/A		
Spot	448	104	(15,215)	(0,30)	N/A		
Spot	431	128	(135,230)	(0,45)	N/A		
Spot	405	106	(25,270)	(0,85)	N/A		
Spot	393	104	(15,190)	(0,5)	N/A		
Spot	390	80	(395,150)	(0,145)	N/A		
Spot	351	80	(395,95)	(0,90)	N/A		
Spot	254	106	(30,245)	(5,60)	N/A		
Spot	234	80	(395,180)	(0,175)	N/A		
Spot	195	106	(30,290)	(5,105)	N/A		
Spot	192	106	(30,205)	(5,20)	N/A		
Spot	133	26	(130,15)	(5,10)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1621A
Survey Date:	November 30, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

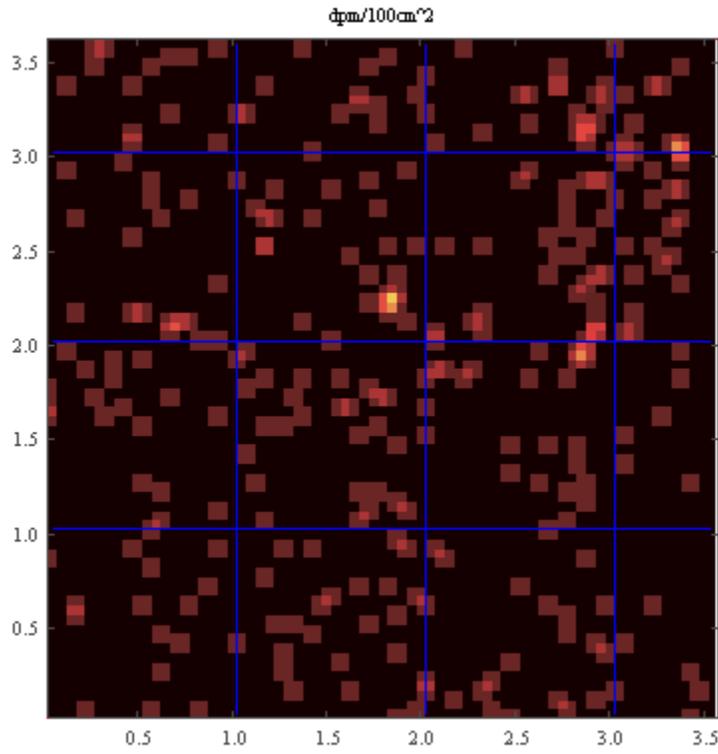


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

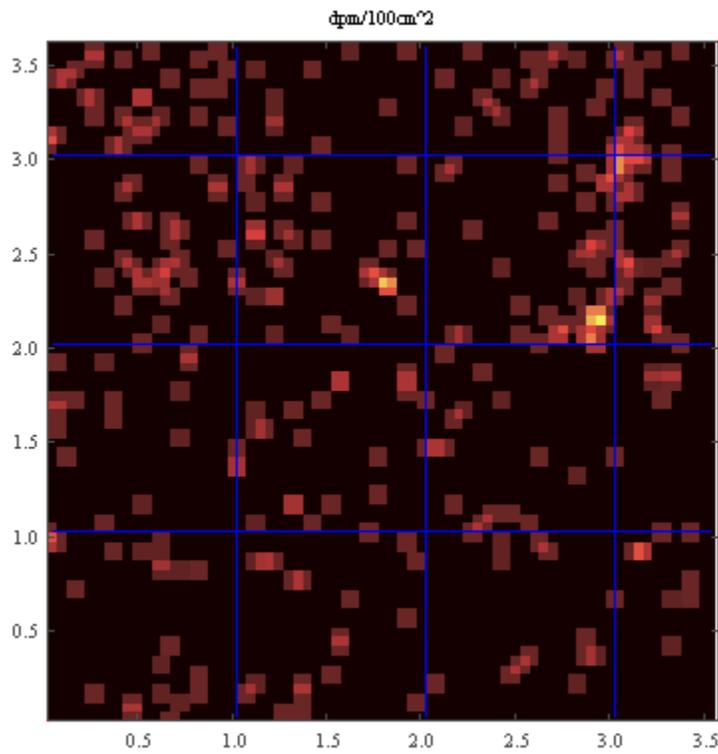


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

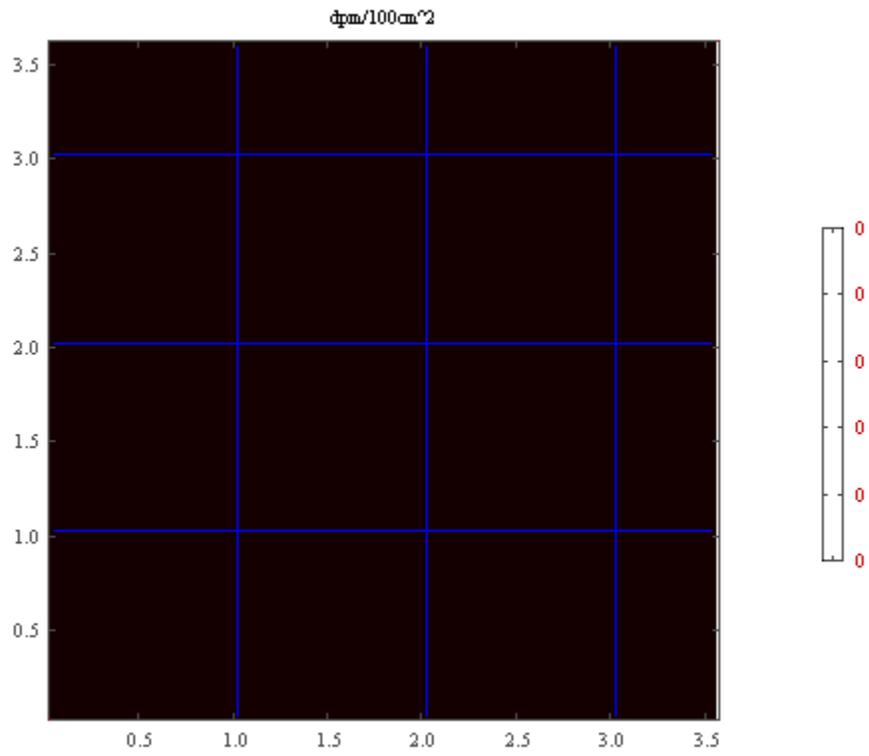


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1631A
Survey Date:	March 3, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

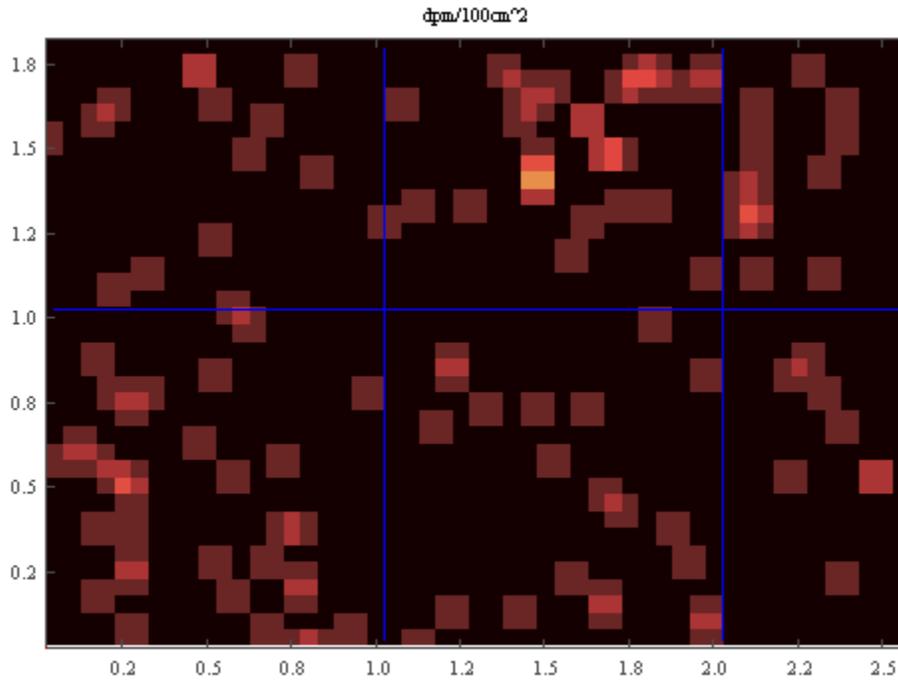


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

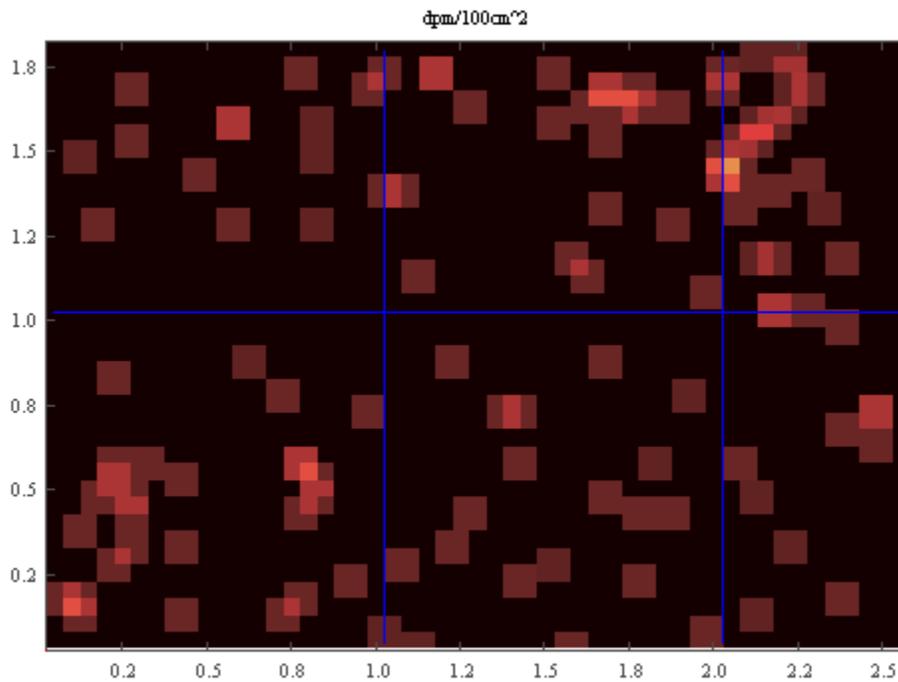


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

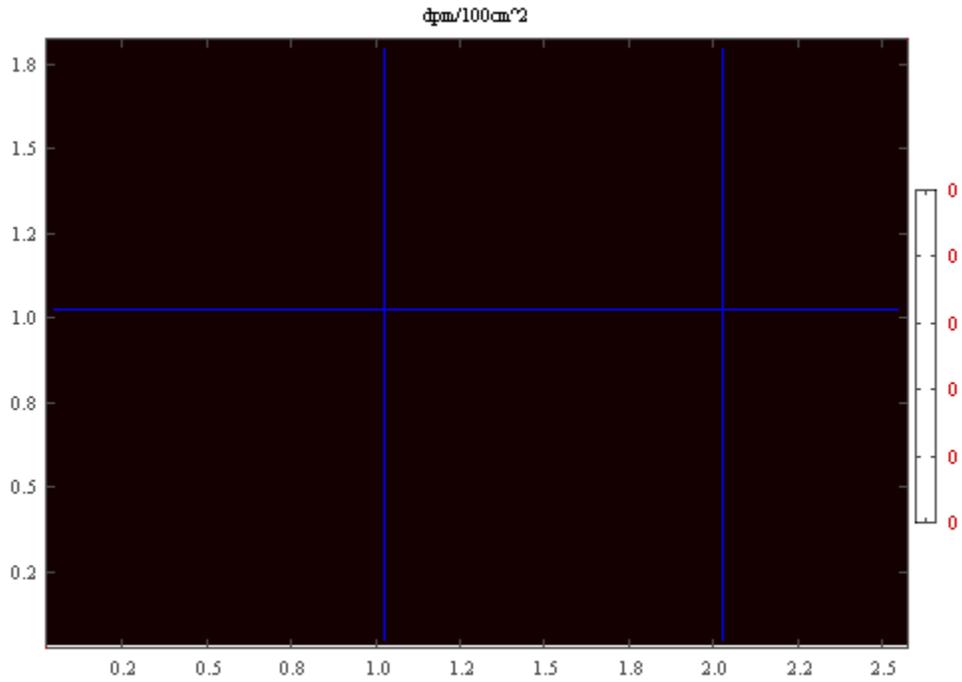


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1701A
Survey Date:	February 9, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	971 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.17 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

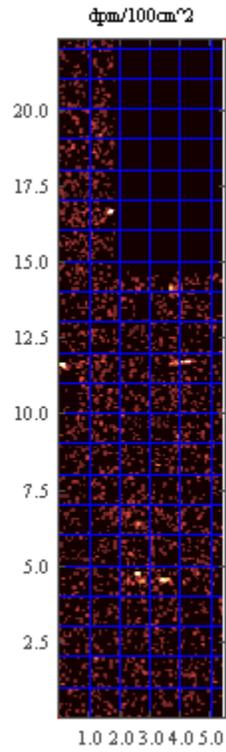


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

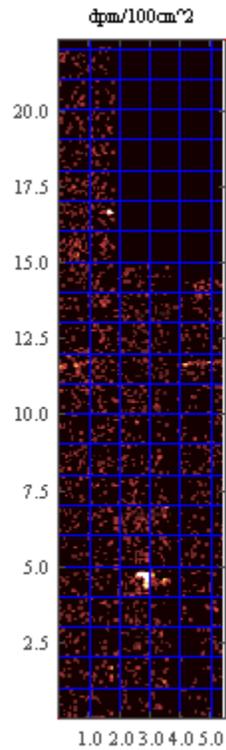


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

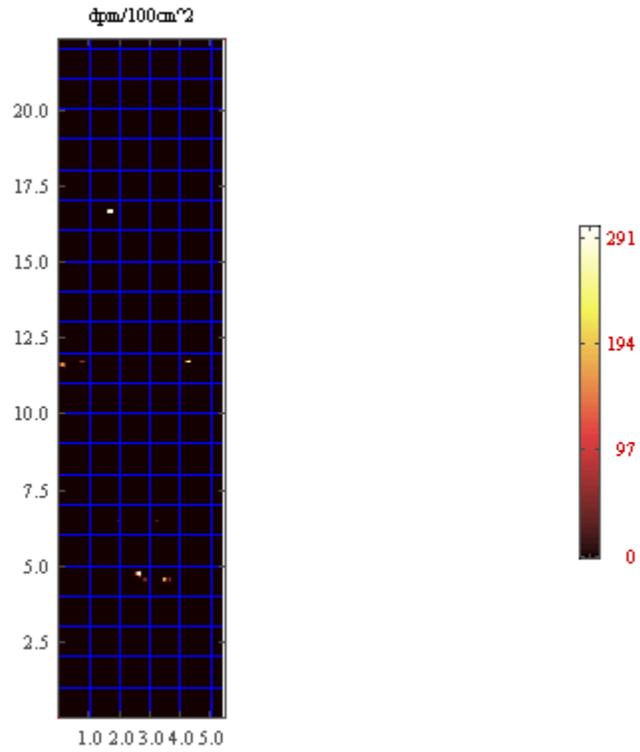


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

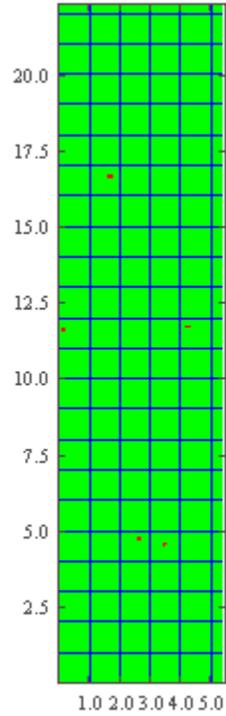


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	971	3	(170,1665)	(160,220)	N/A		
Spot	367	4	(265,480)	(75,475)	N/A		
Spot	251	7	(425,1175)	(55,455)	N/A		
Spot	224	4	(345,460)	(155,455)	N/A		
Spot	183	2	(15,1160)	(5,445)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1701B
Survey Date:	February 11, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	254 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.04 m ²

This survey is not position correlated.

Primary Detector:

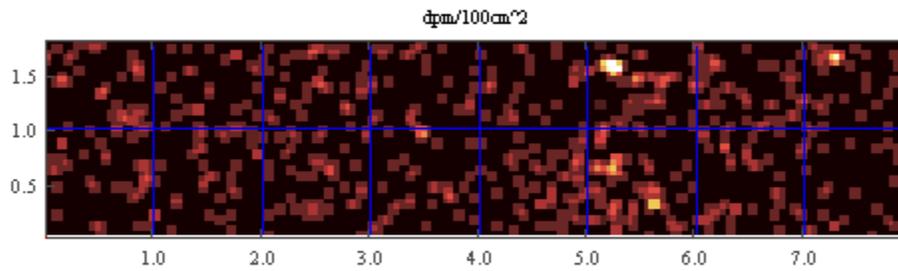


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

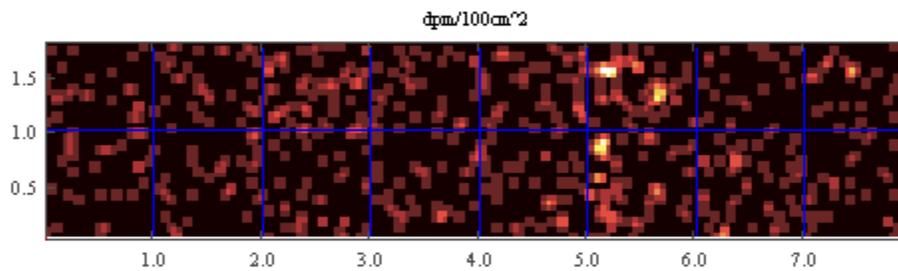


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

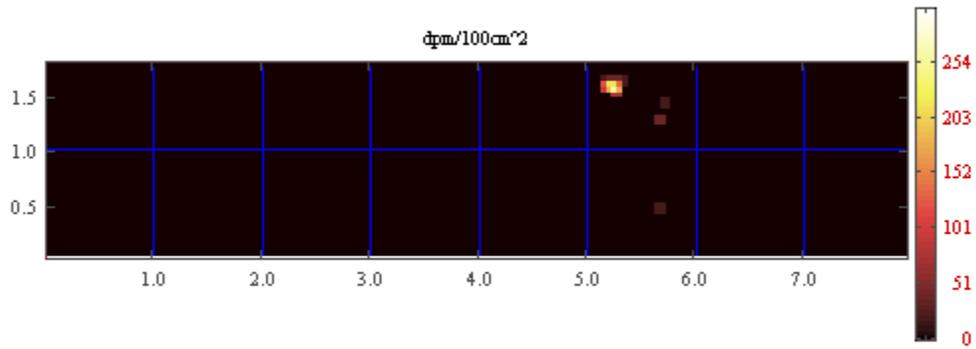


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

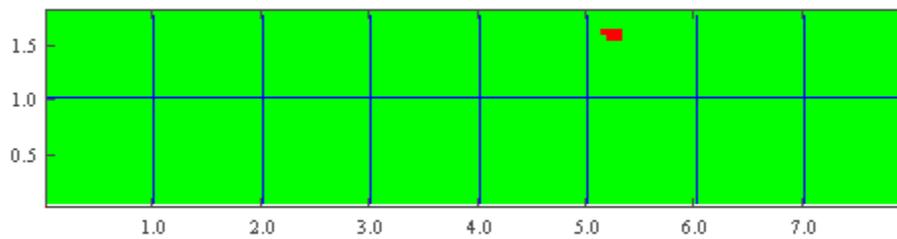


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	254	106	(525,155)	(0,150)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1711A
Survey Date:	February 16, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

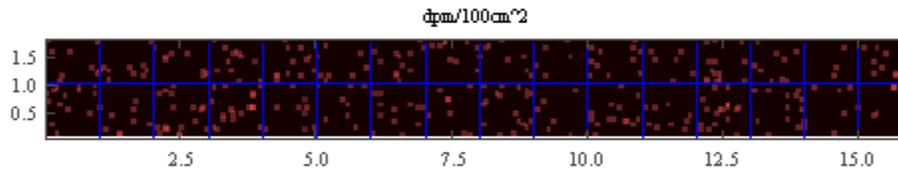


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

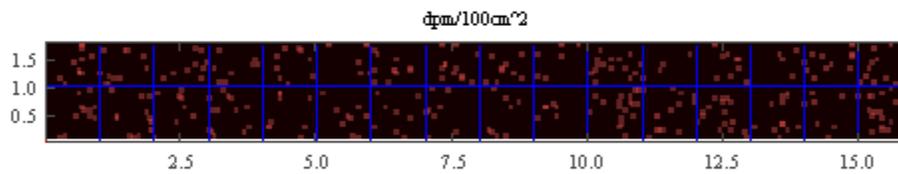


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA1711B
Survey Date:	February 15, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

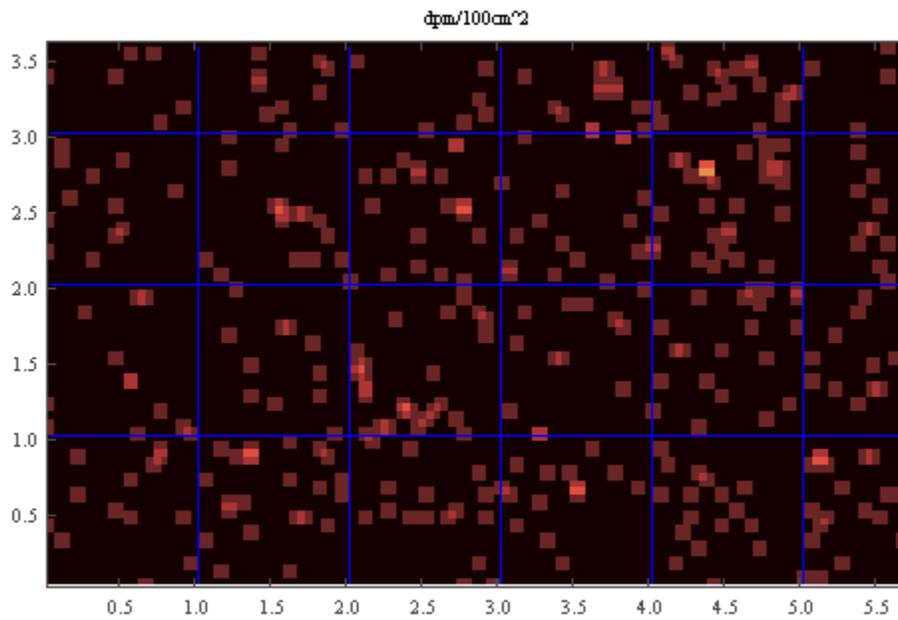


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

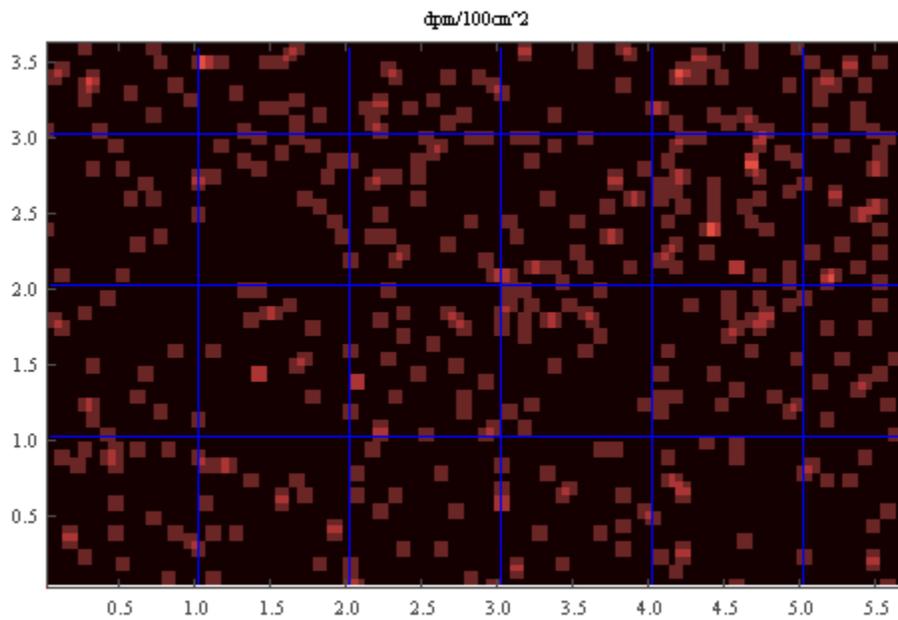


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

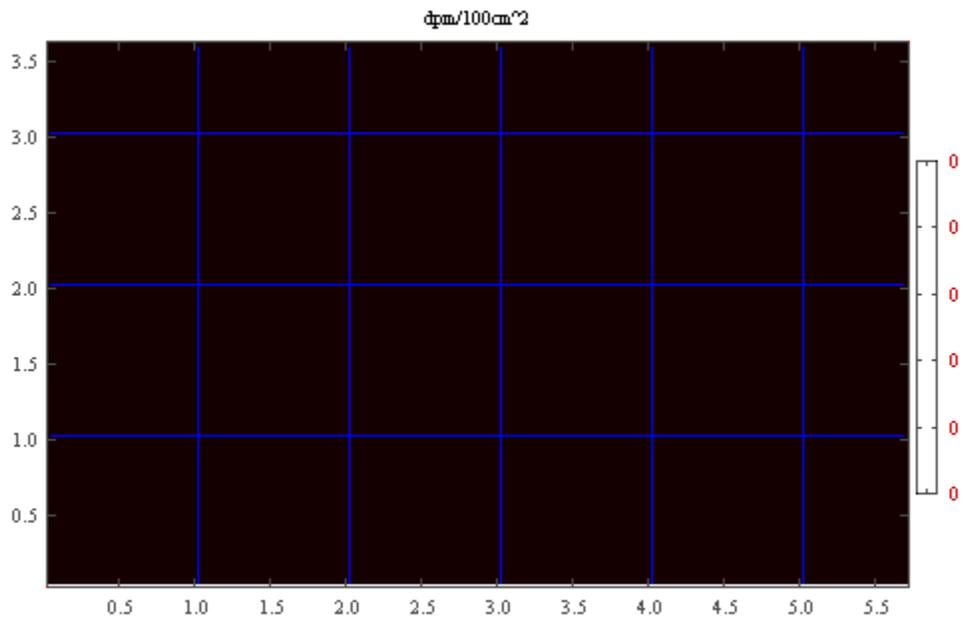


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1711C
Survey Date:	February 23, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

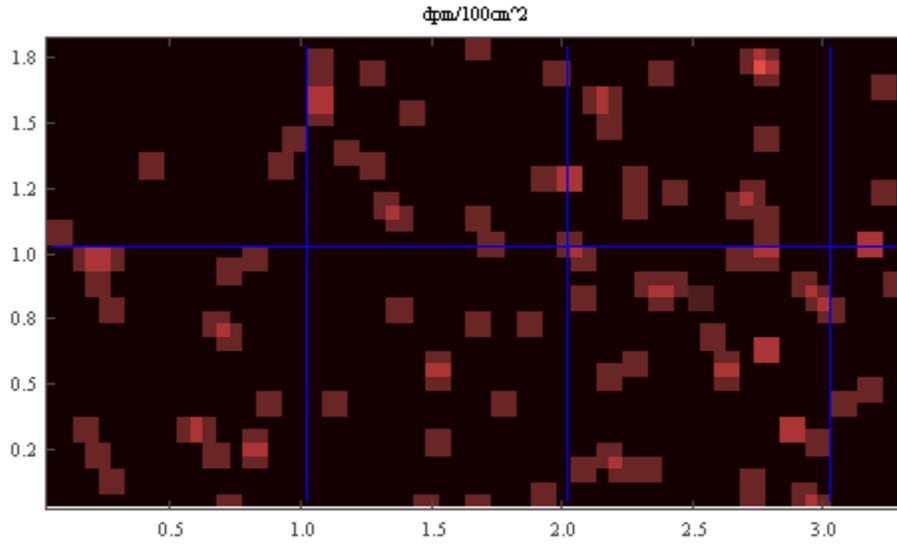


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

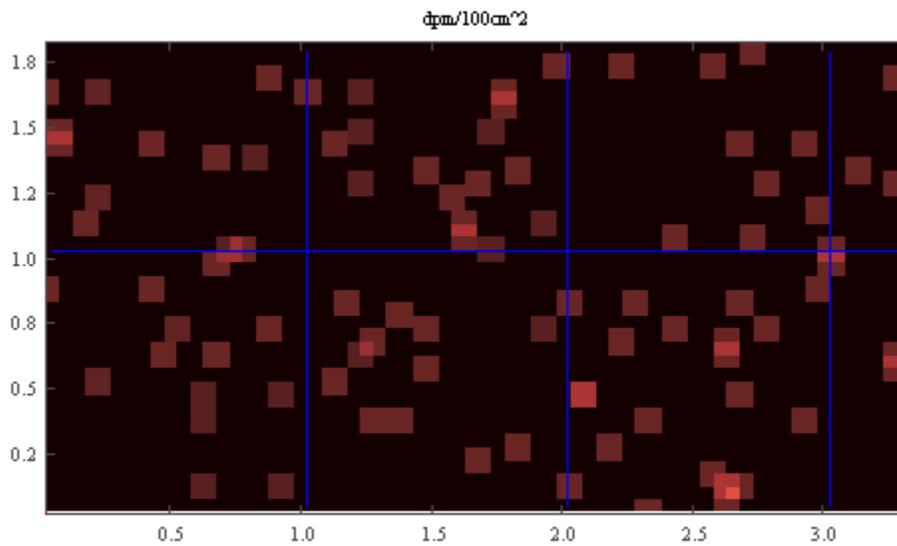


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

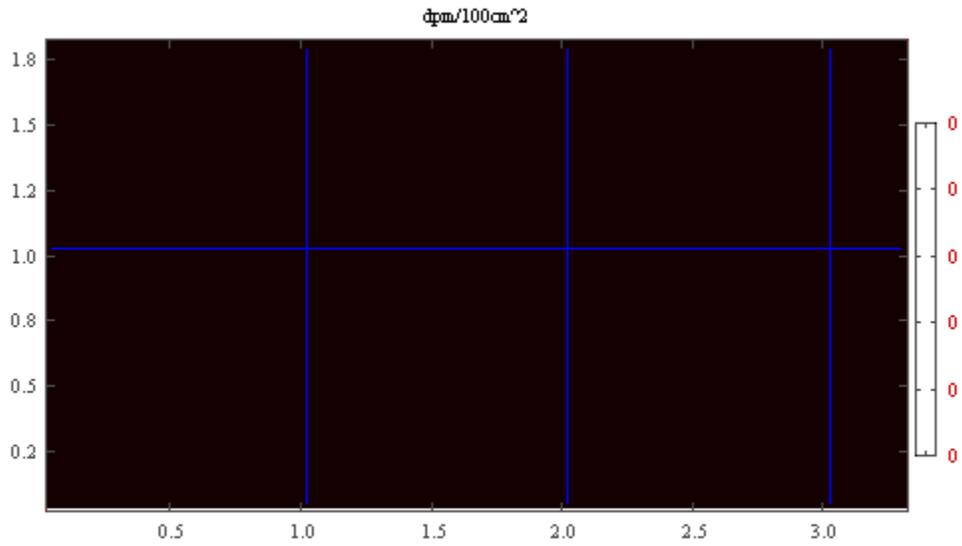


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1711D
Survey Date:	March 1, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	388 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.15 m ²

This survey is not position correlated.

Primary Detector:

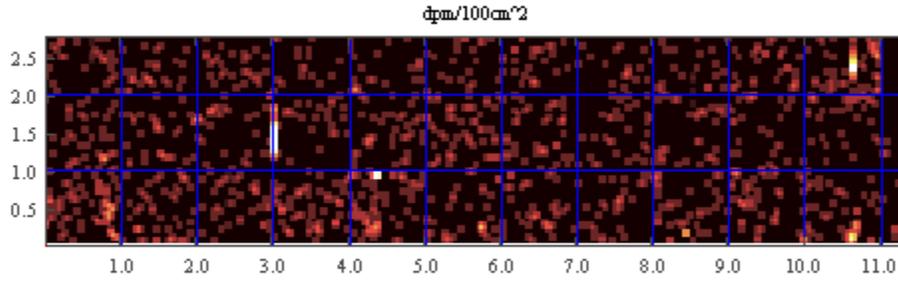


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

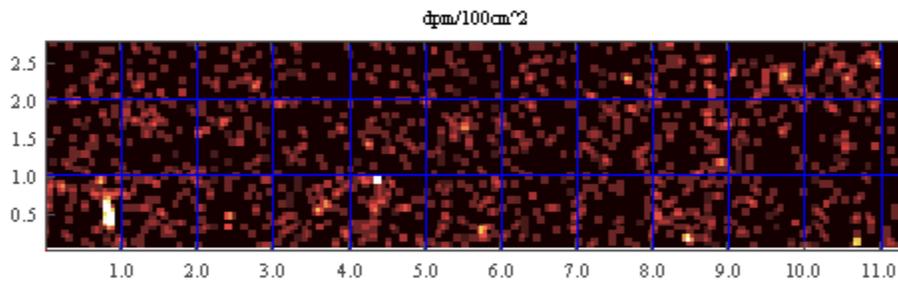


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

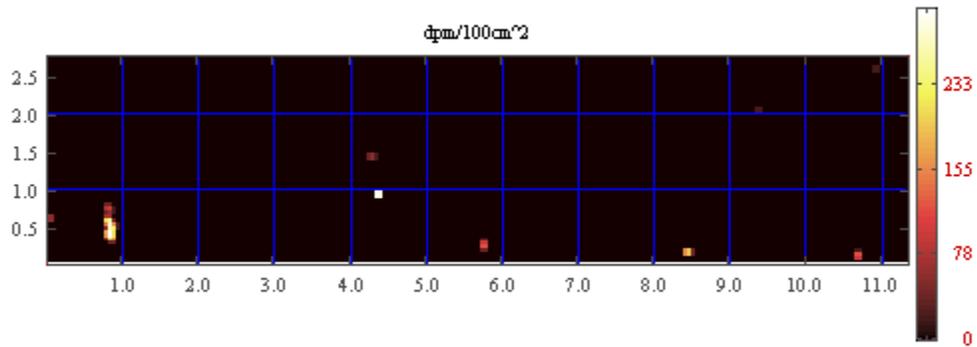


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

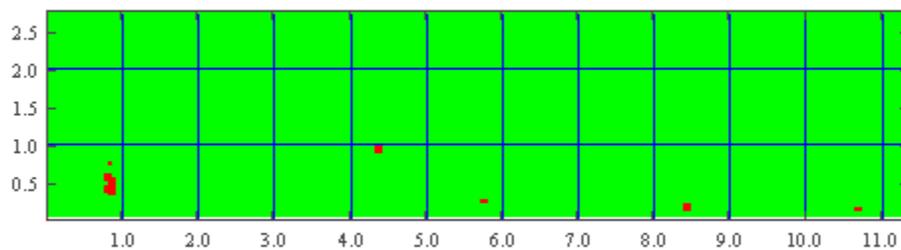


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	388	18	(85,45)	(0,35)	N/A		
Spot	293	88	(435,90)	(0,80)	N/A		
Spot	254	18	(85,60)	(0,50)	N/A		
Spot	195	170	(845,15)	(0,5)	N/A		
Spot	117	116	(575,25)	(0,15)	N/A		
Spot	117	214	(1065,15)	(0,5)	N/A		
Spot	100	18	(85,75)	(0,65)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1721A
Survey Date:	February 16, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

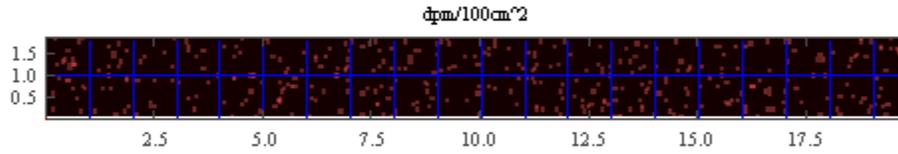


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

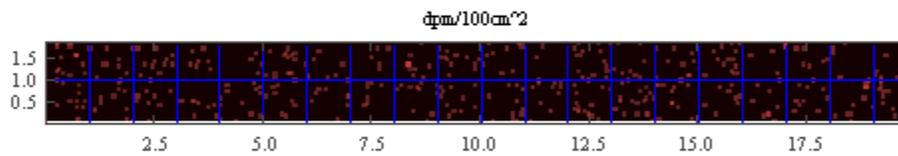


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

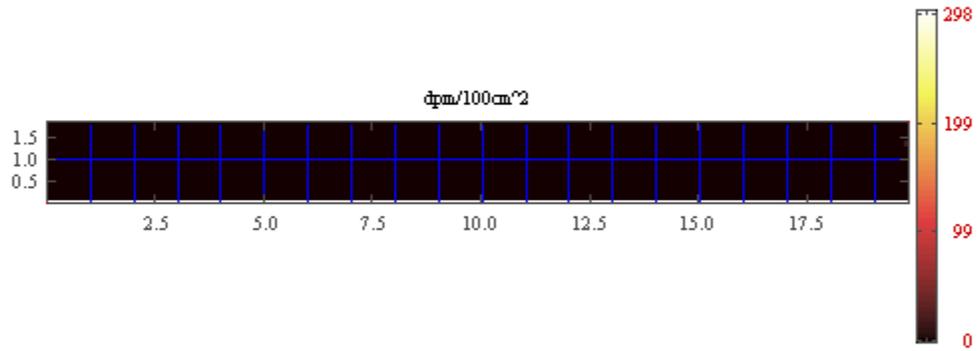


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1721C
Survey Date:	March 2, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	429 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.08 m ²

This survey is not position correlated.

Primary Detector:

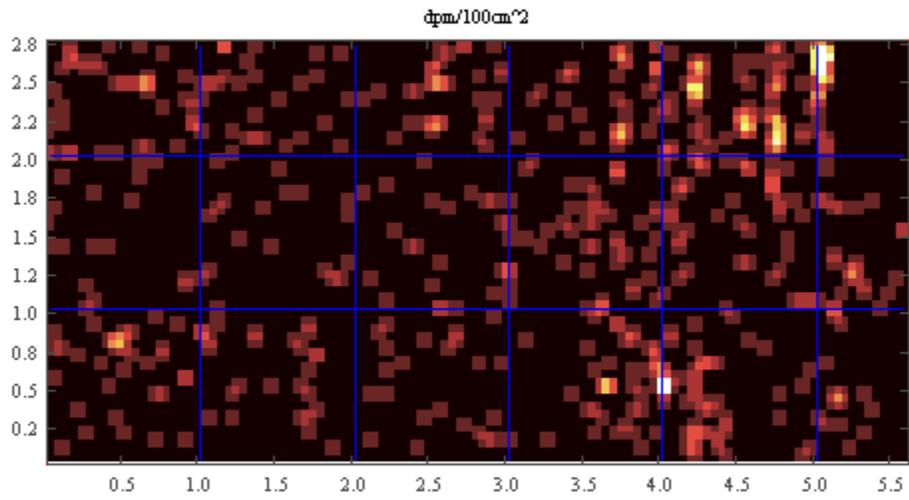


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

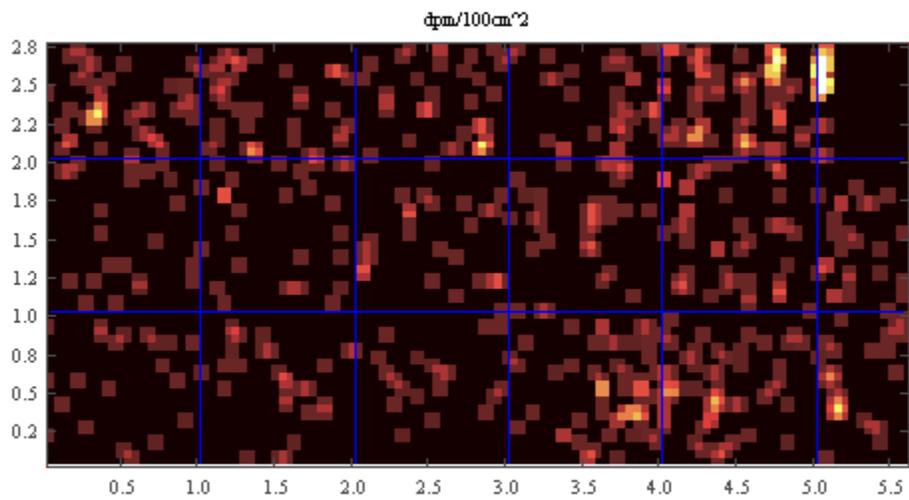


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

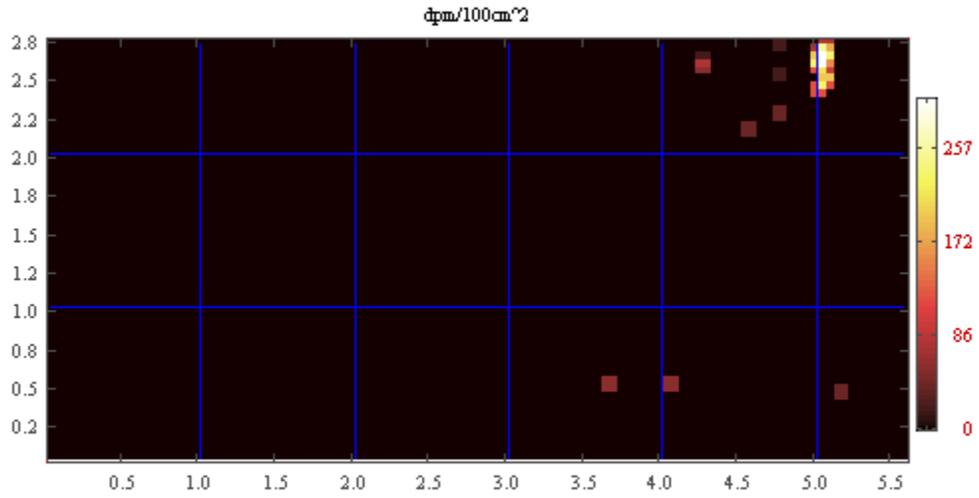


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

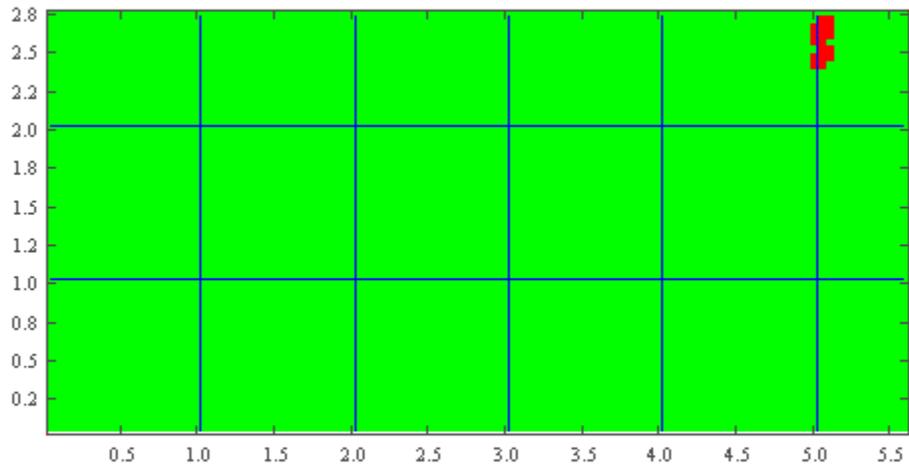


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	429	326	(505,265)	(0,75)	N/A		
Spot	234	326	(505,245)	(0,55)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1721D
Survey Date:	March 5, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	137 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

This survey is not position correlated.

Primary Detector:

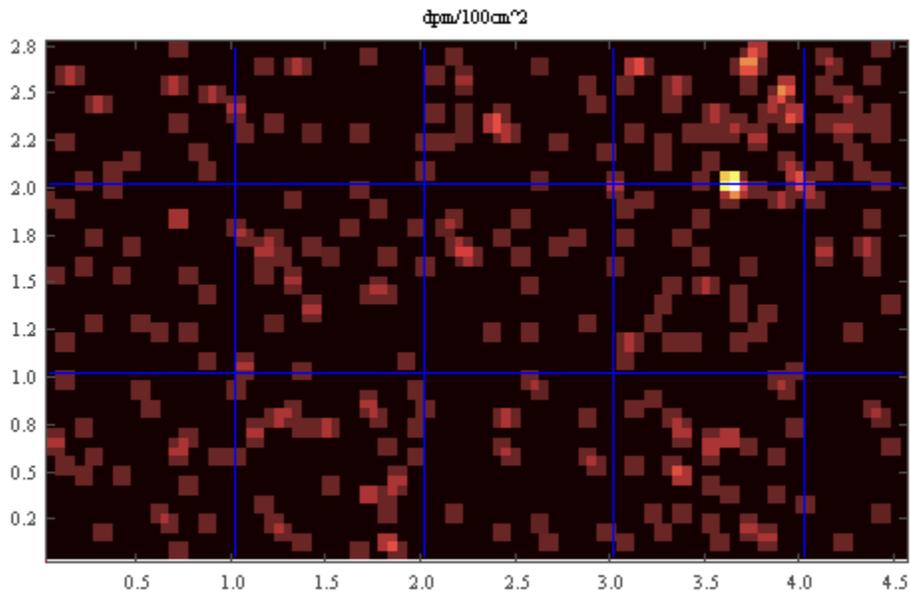


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

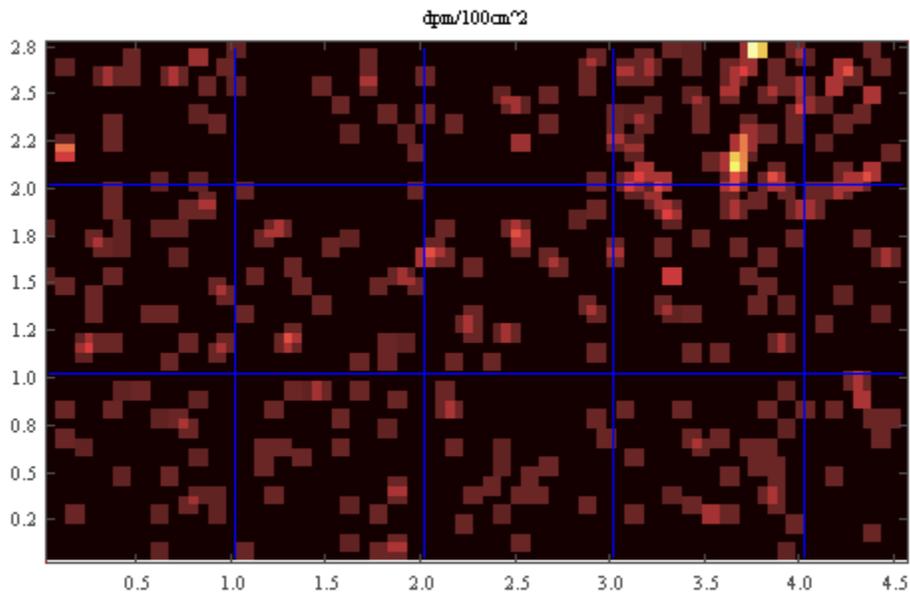


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

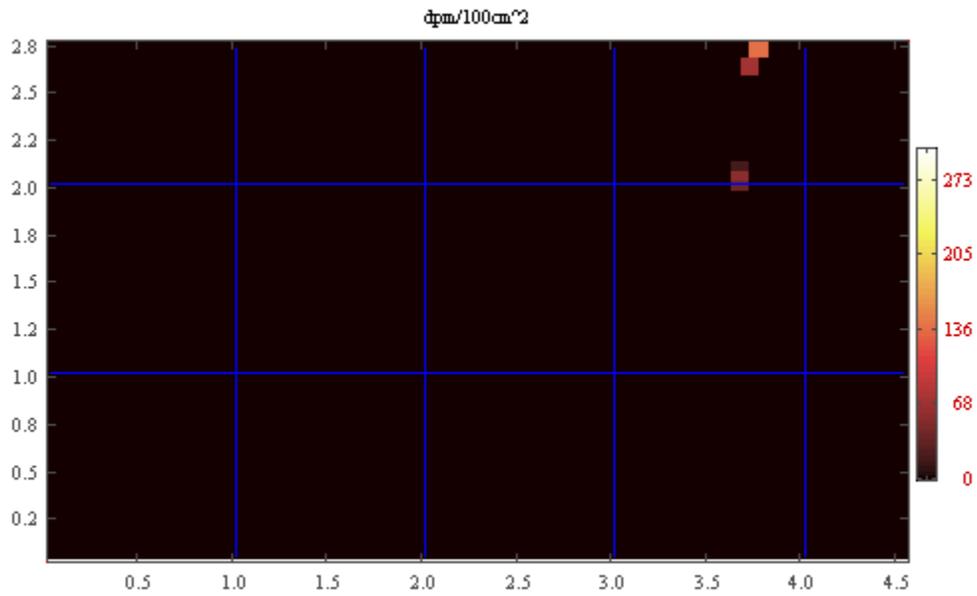


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

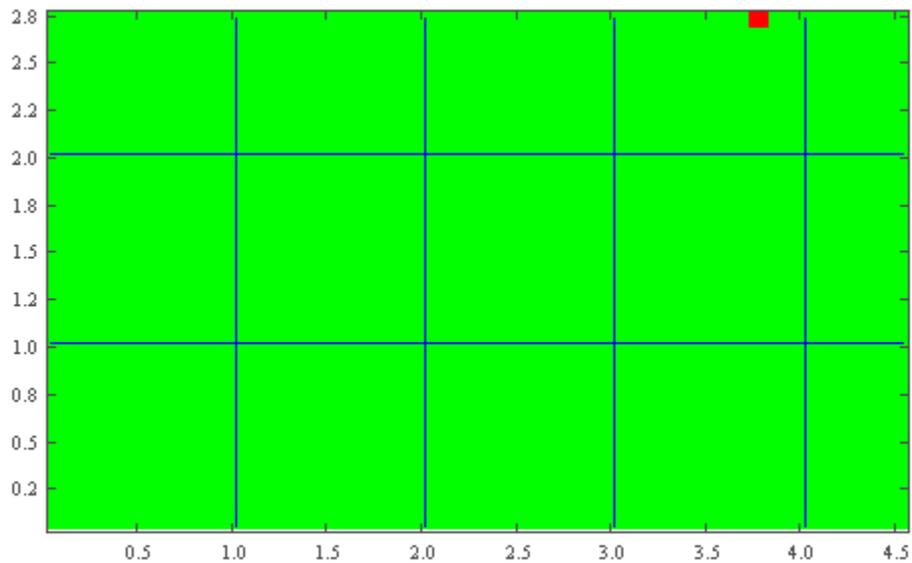


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	137	256	(375,270)	(0,80)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA1721E
Survey Date:	March 8, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

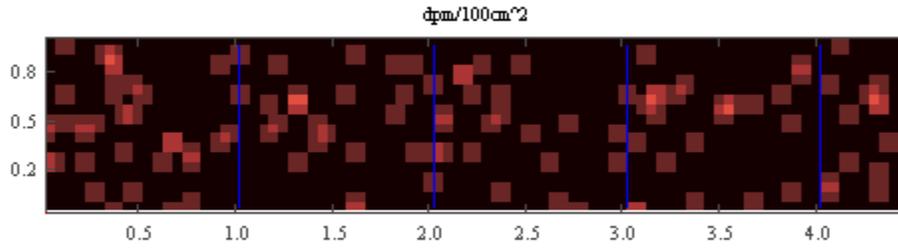


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

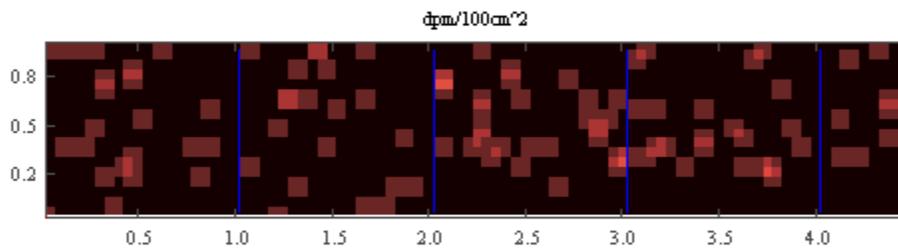


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

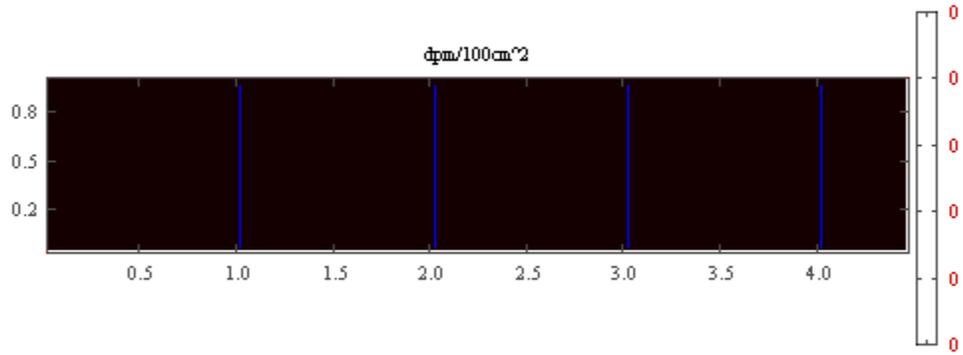


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1731A
Survey Date:	March 2, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

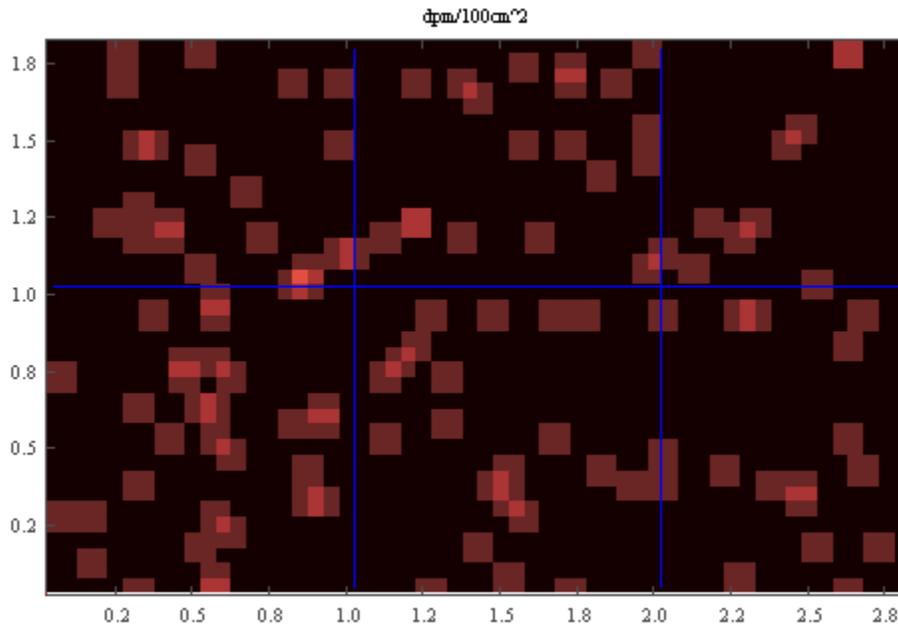


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

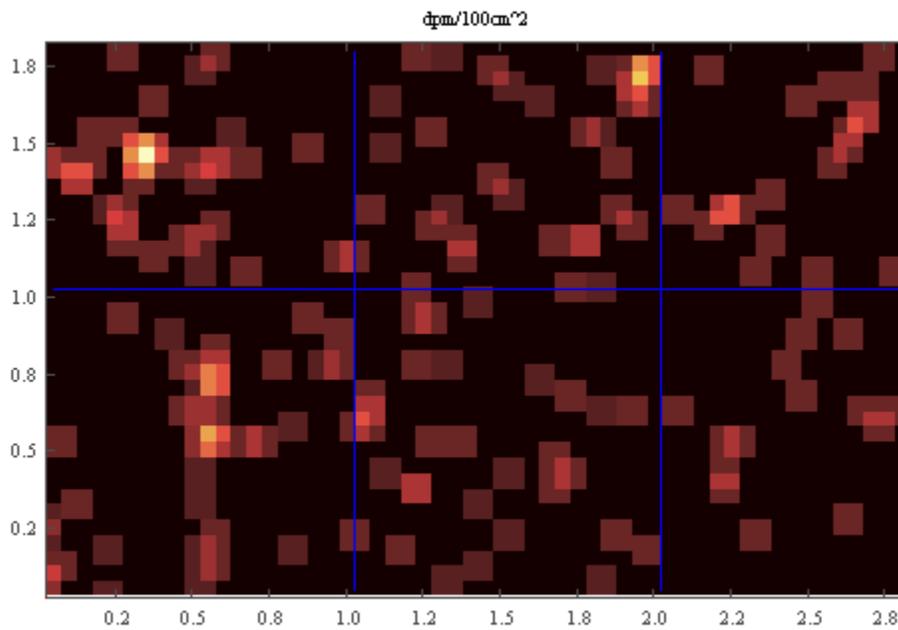


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

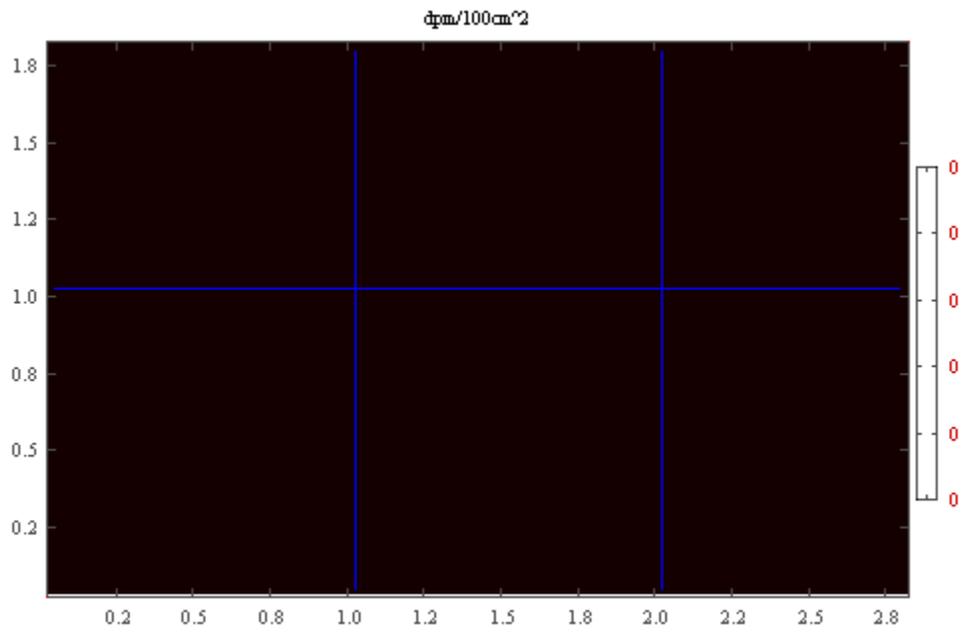


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1731B
Survey Date:	March 2, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

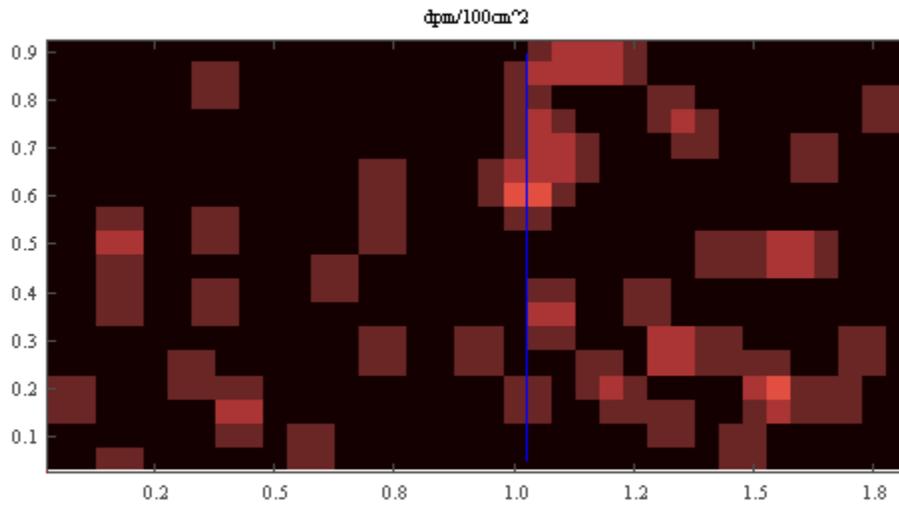


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

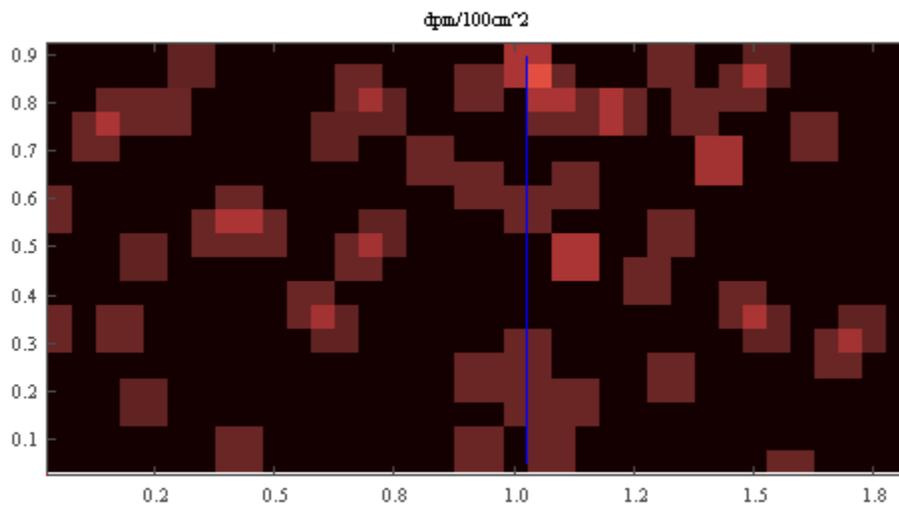


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

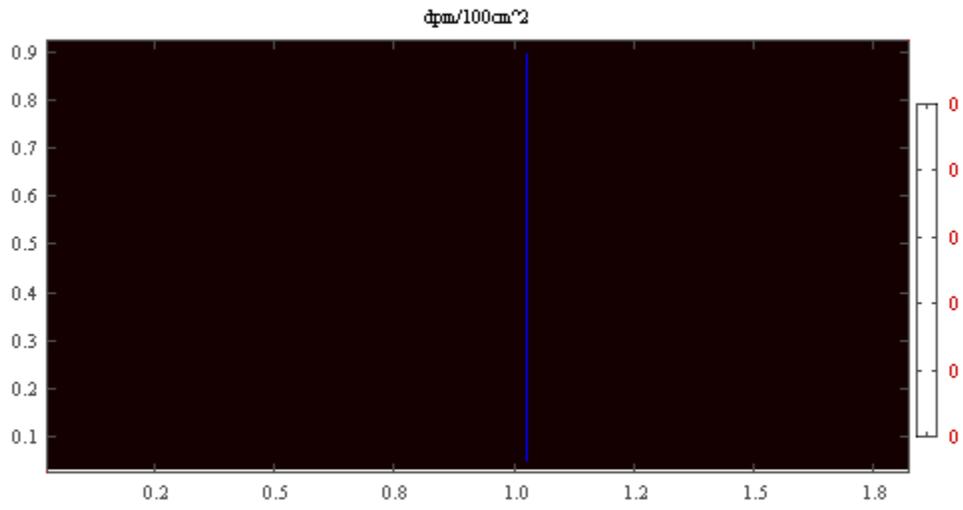


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1801A
Survey Date:	December 6, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

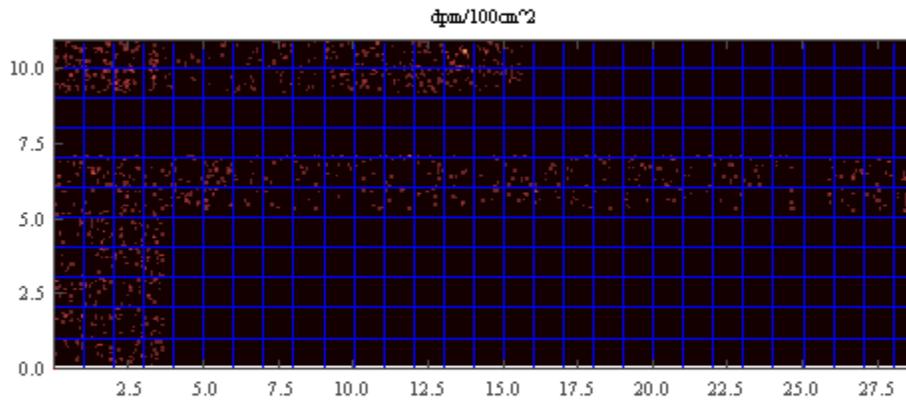


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

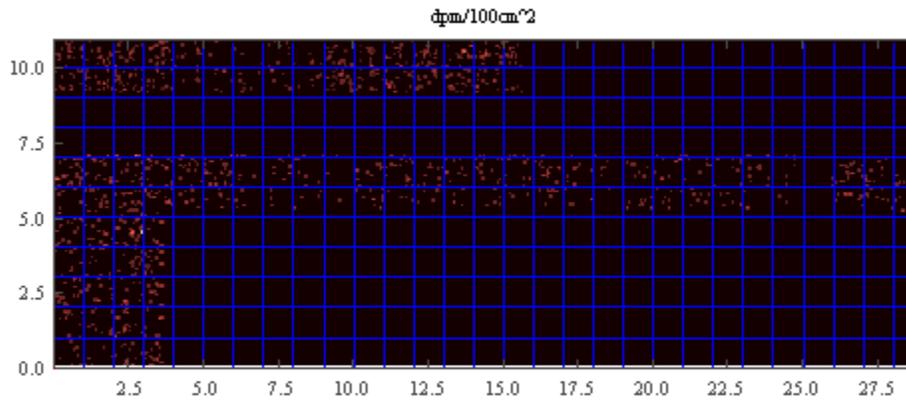


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

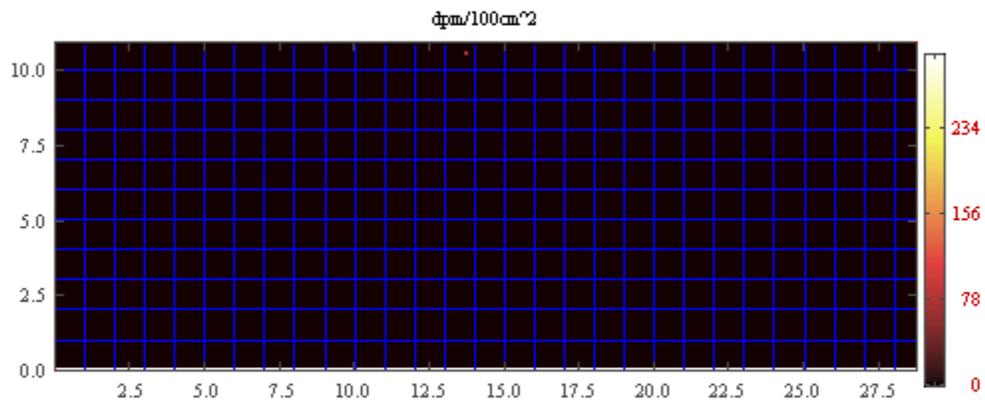


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1811A
Survey Date:	December 7, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

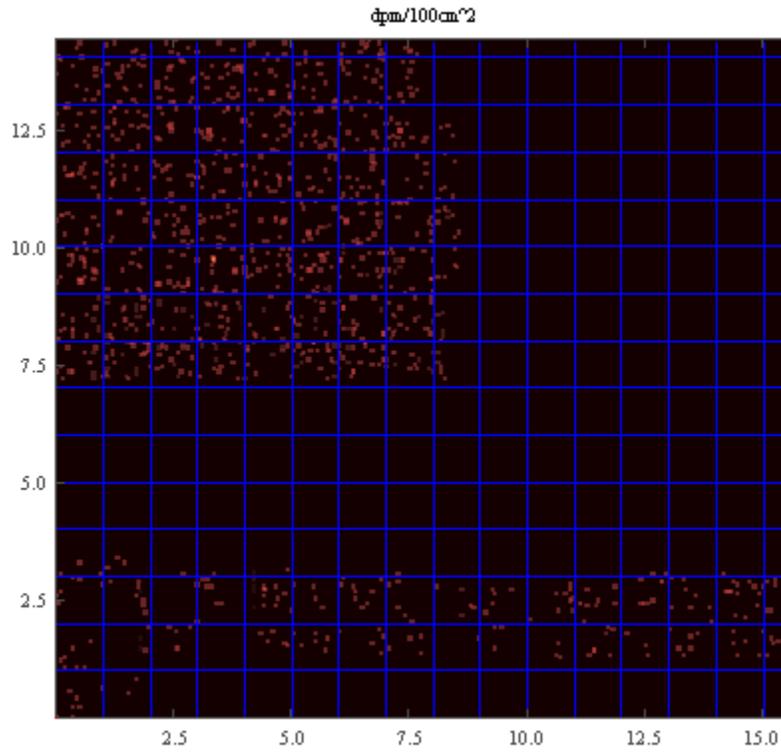


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

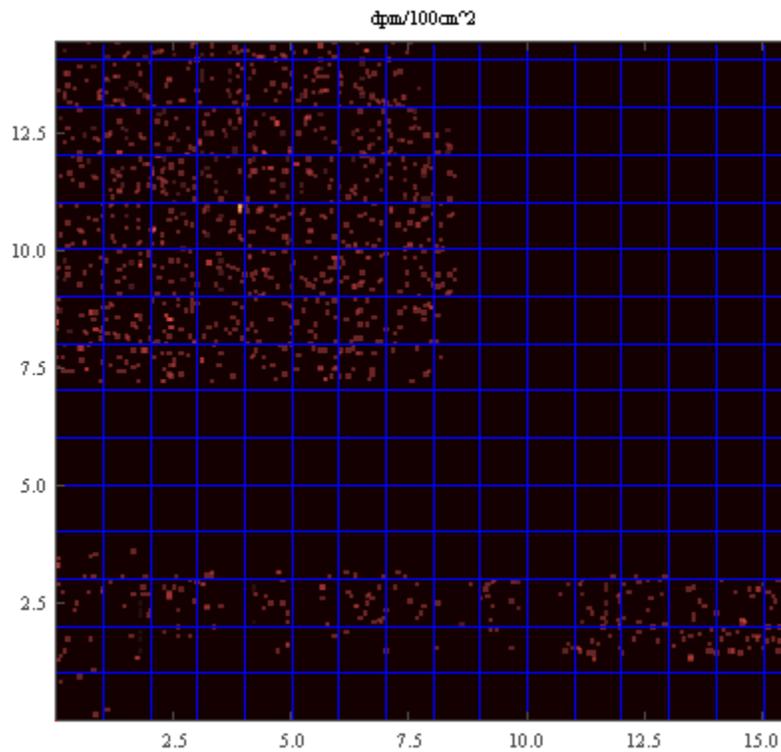


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

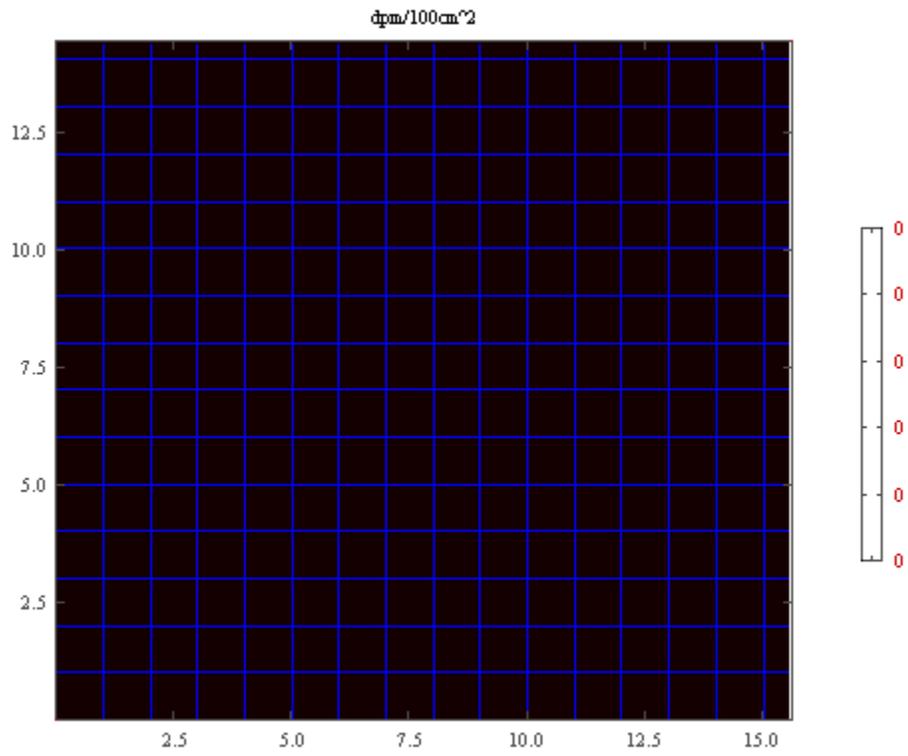


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1821A
Survey Date:	December 7, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

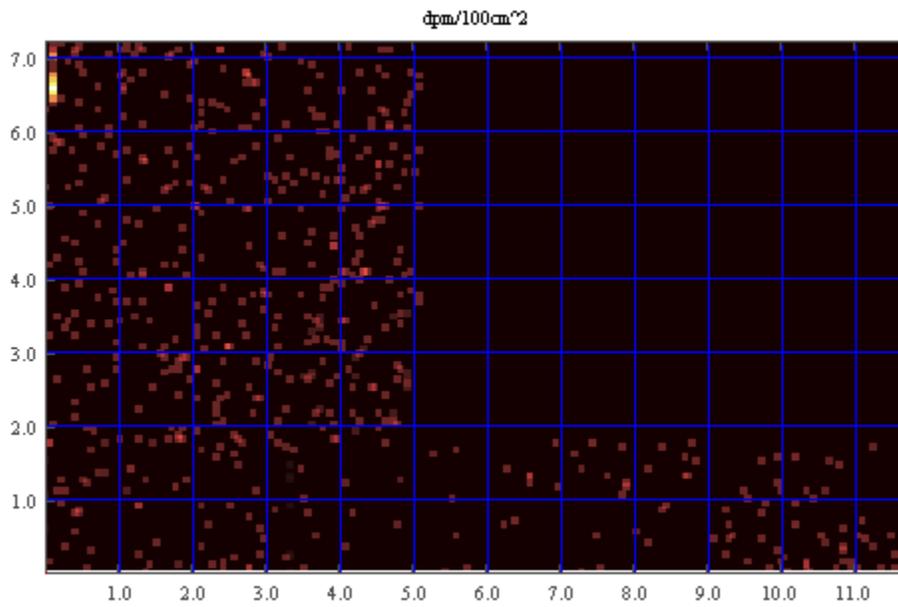


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

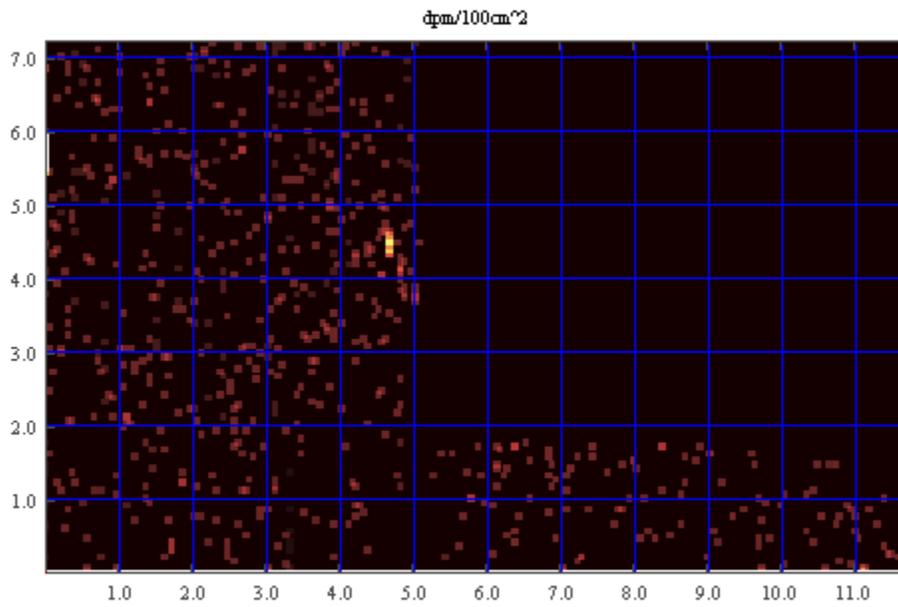


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

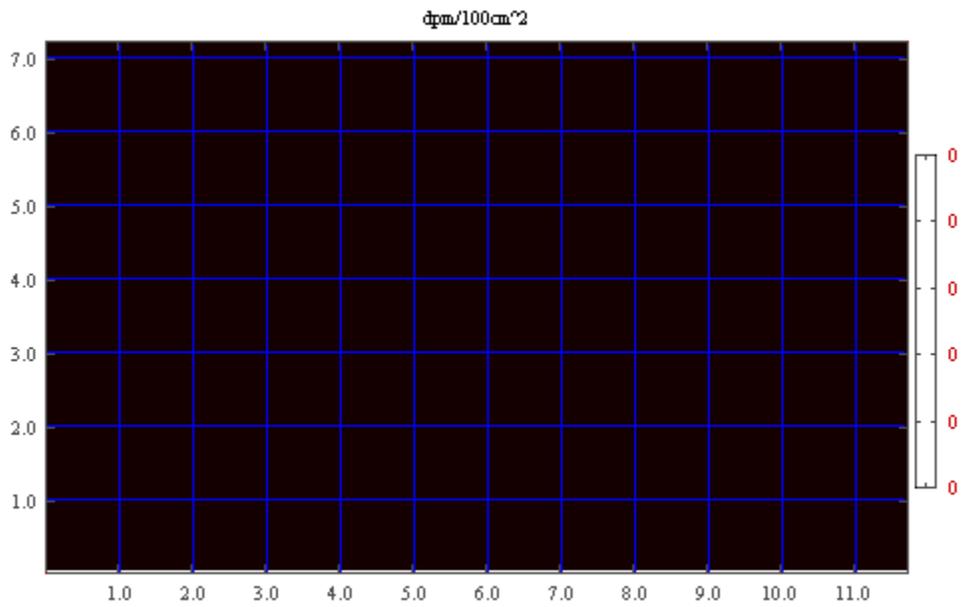


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1821C
Survey Date:	March 5, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

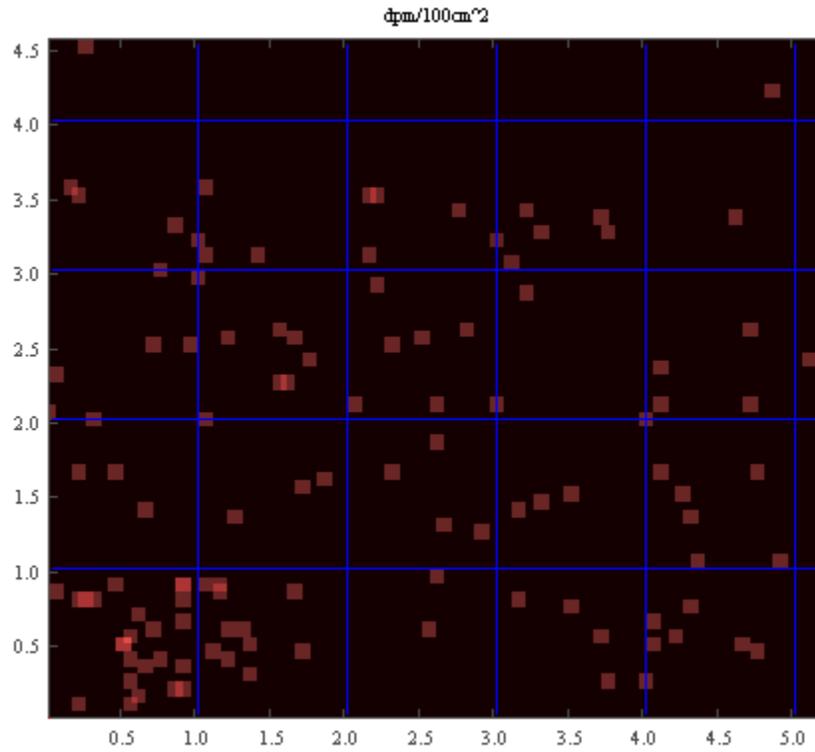


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

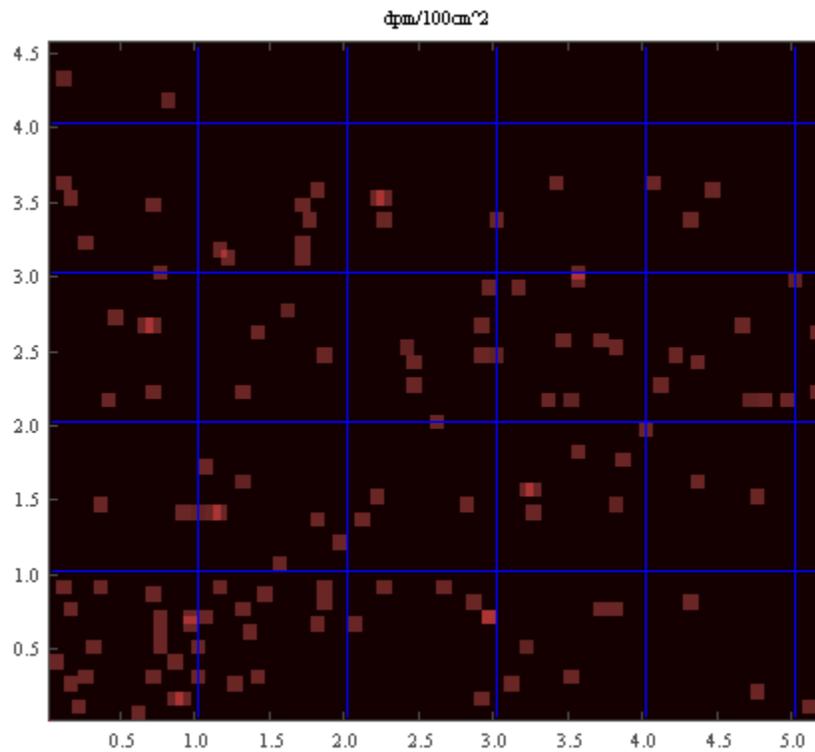


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

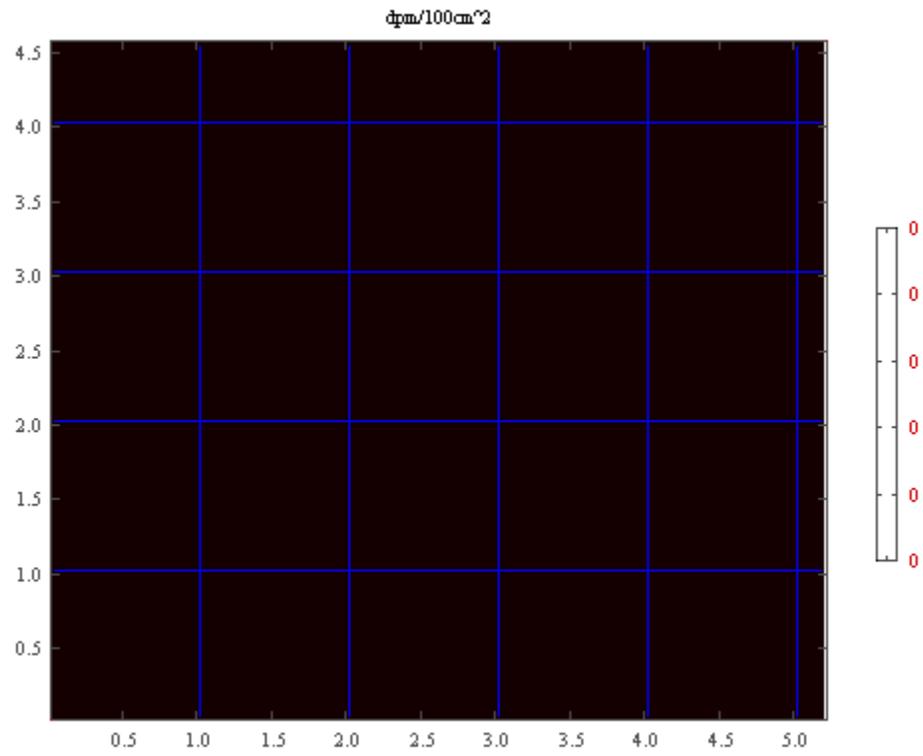


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1821E
Survey Date:	March 8, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

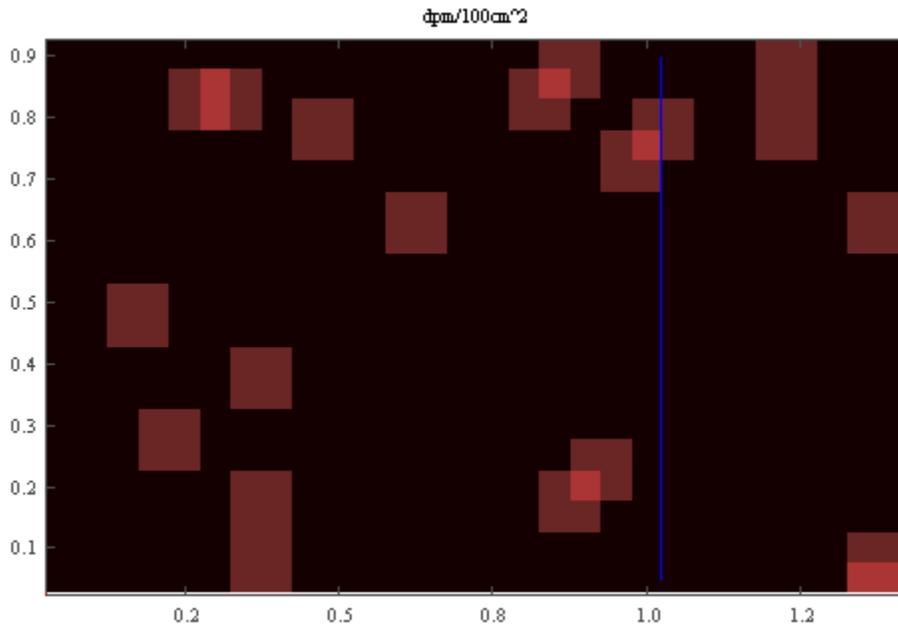


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

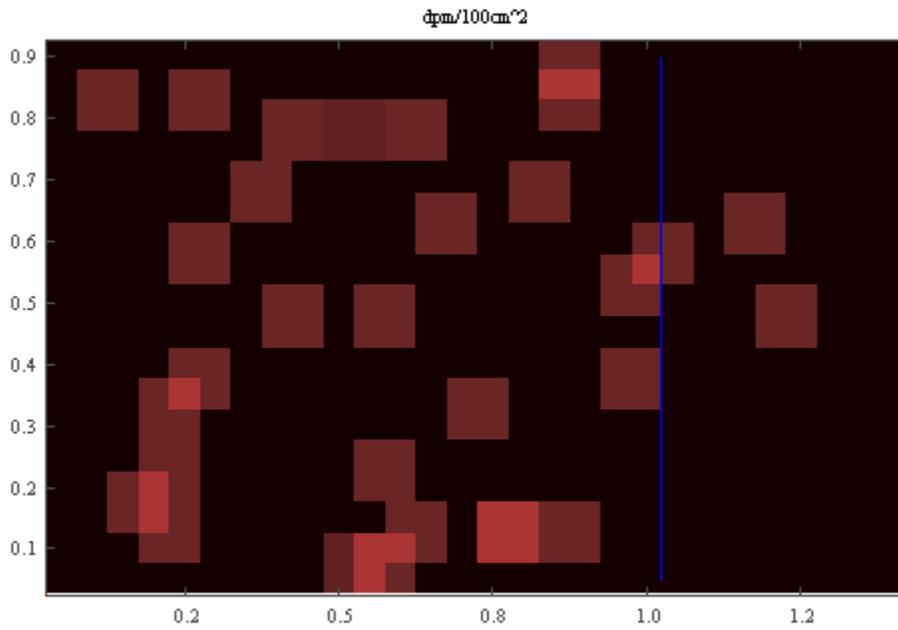


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

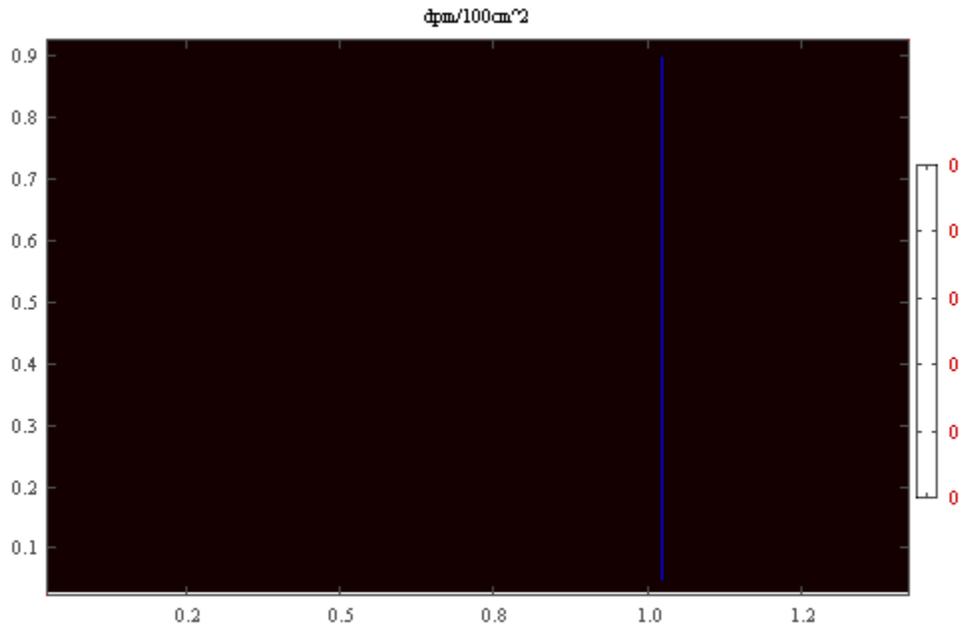


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1831A
Survey Date:	March 5, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

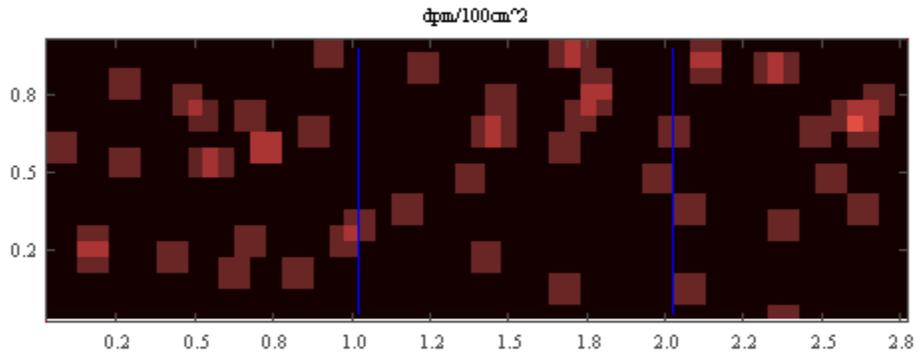


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

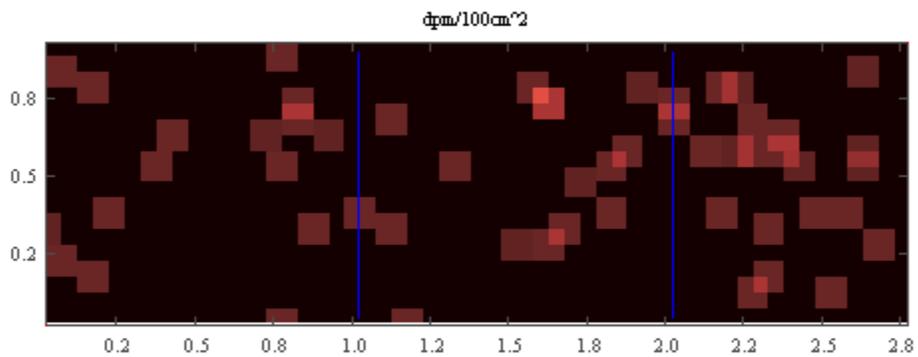


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

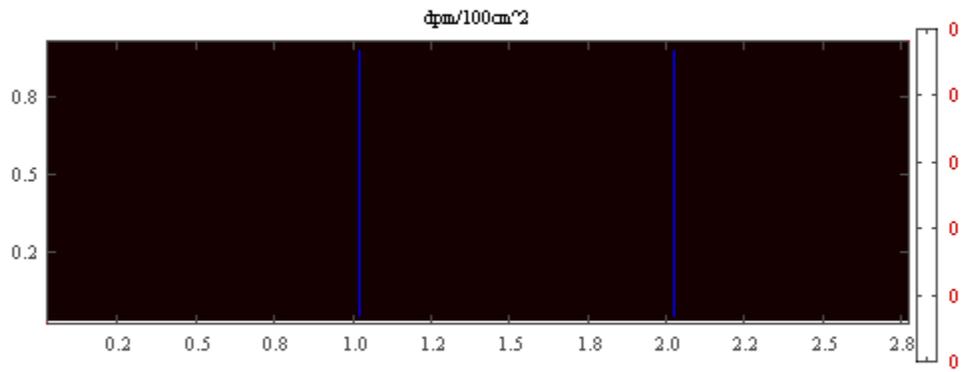


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1831B
Survey Date:	March 8, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

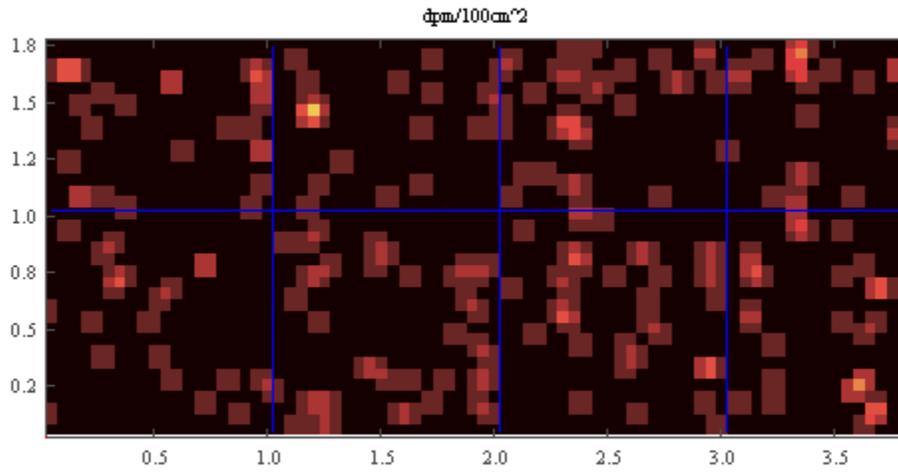


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

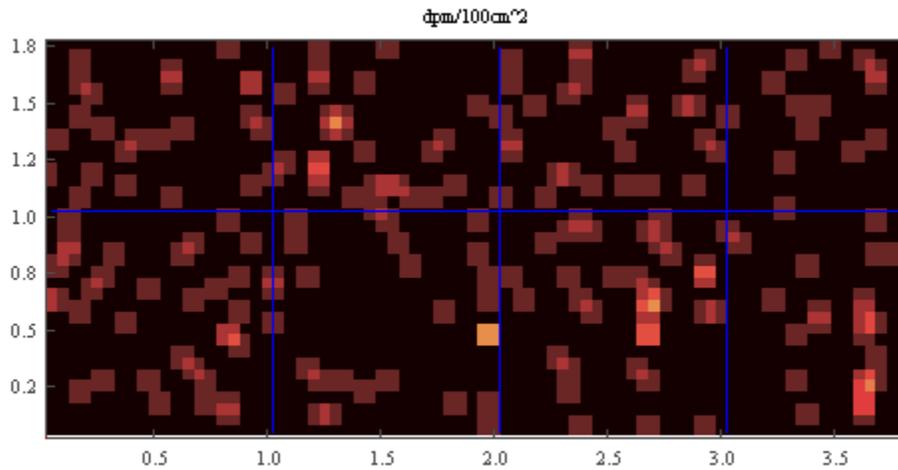


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

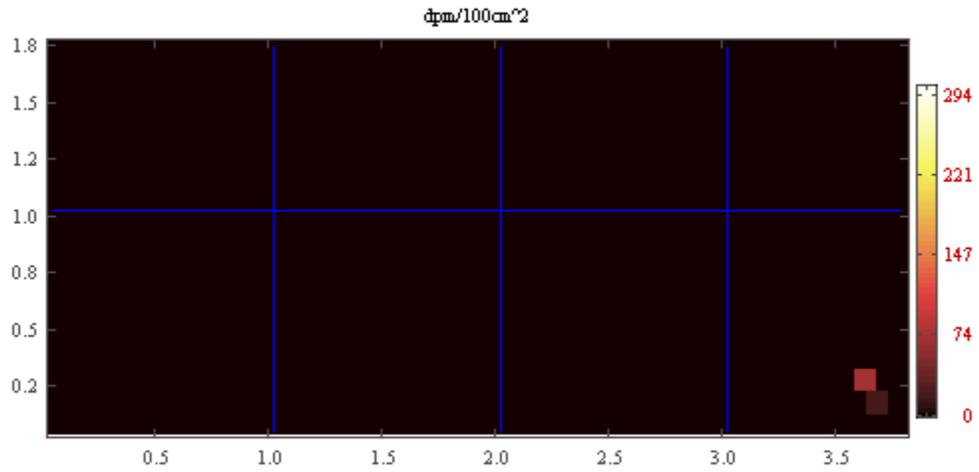


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1901A
Survey Date:	February 14, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

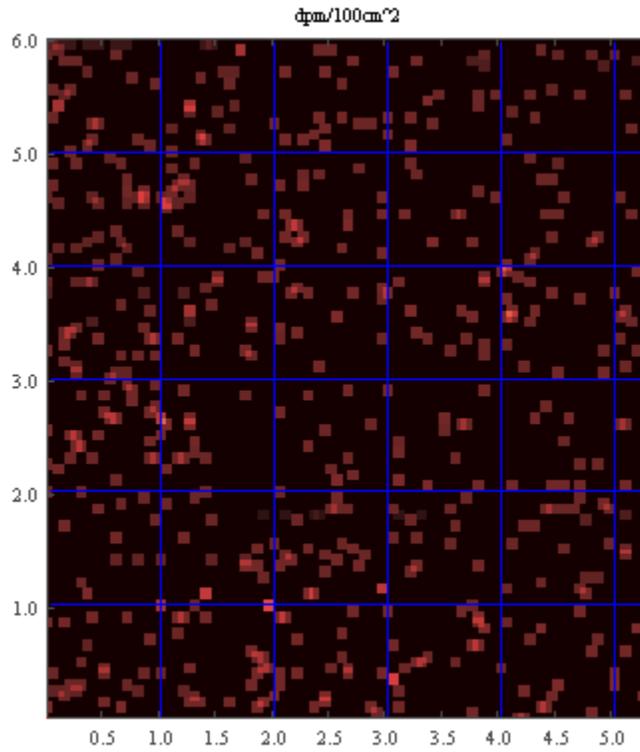


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

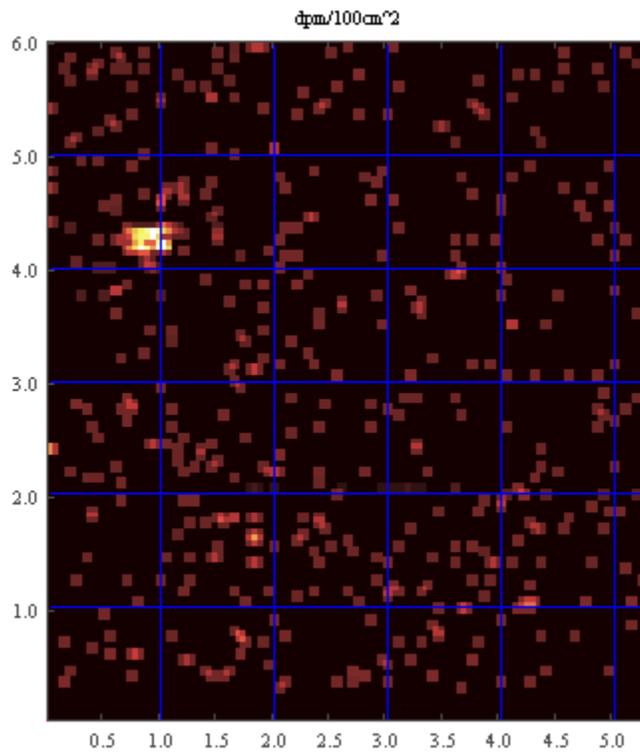


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

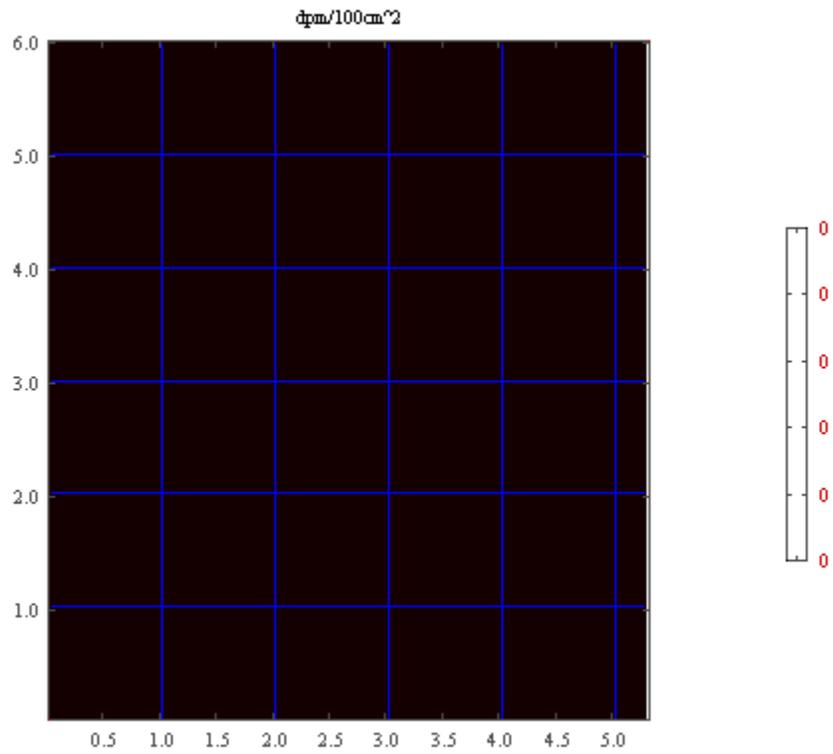


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1911A
Survey Date:	December 9, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

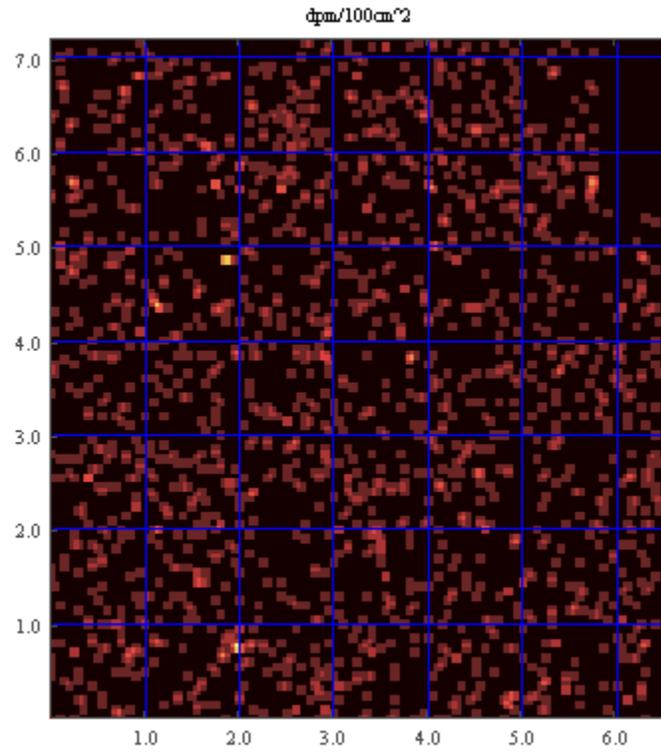


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

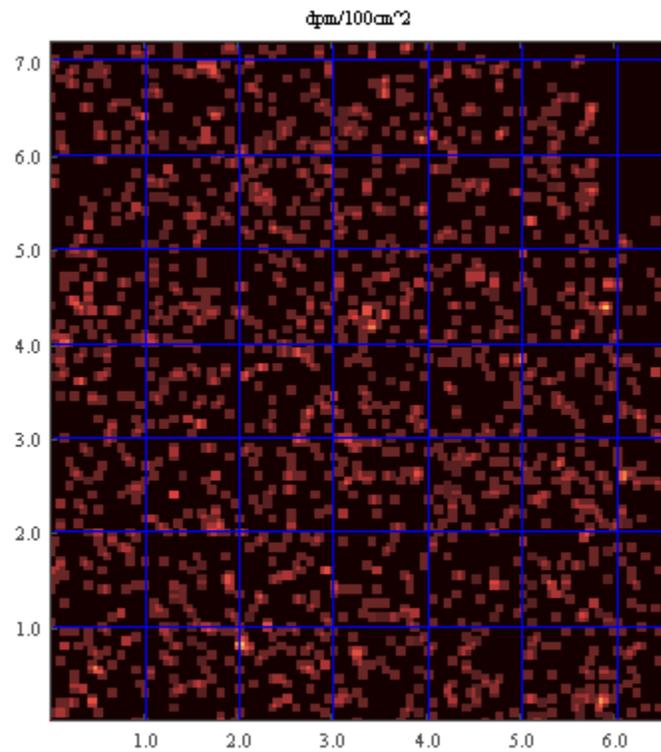


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

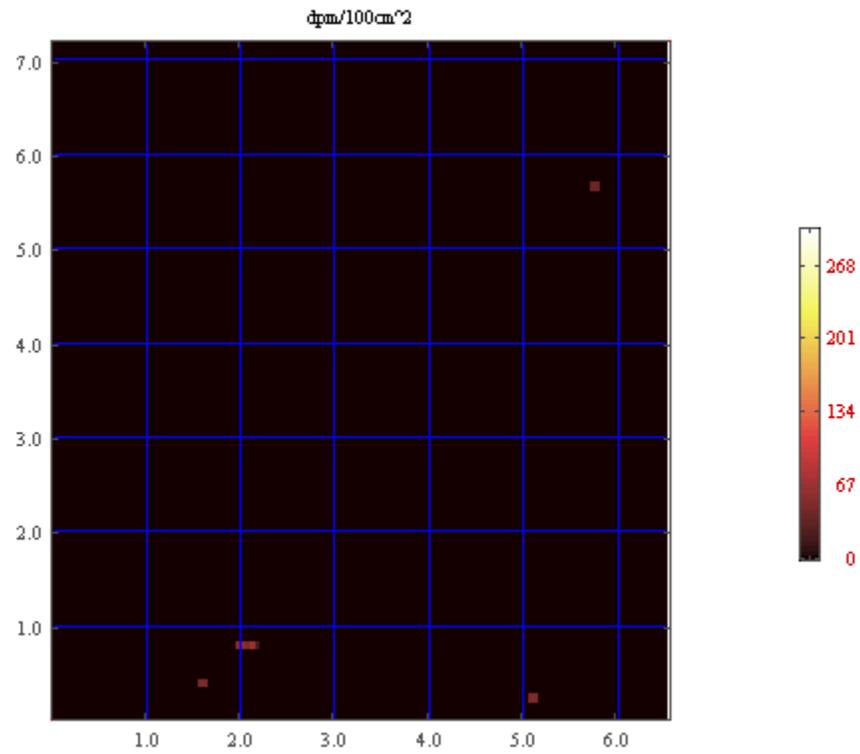


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1921A
Survey Date:	December 9, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

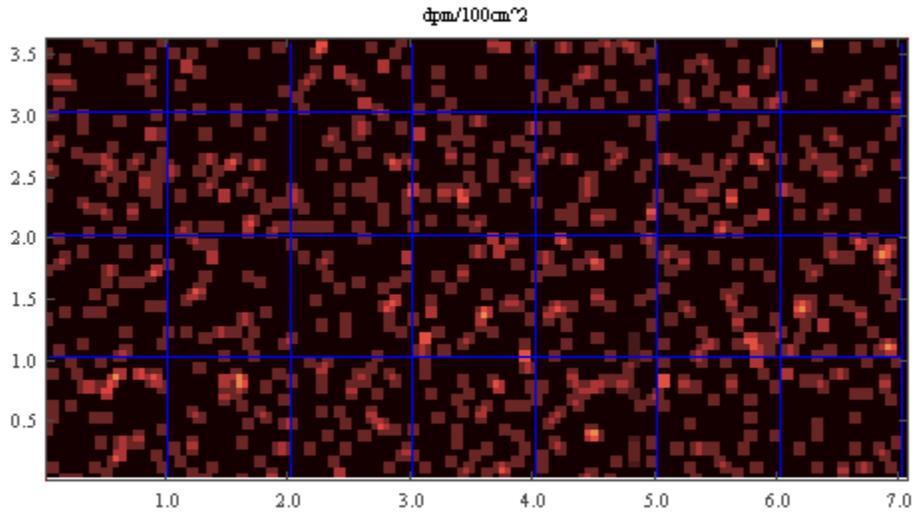


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

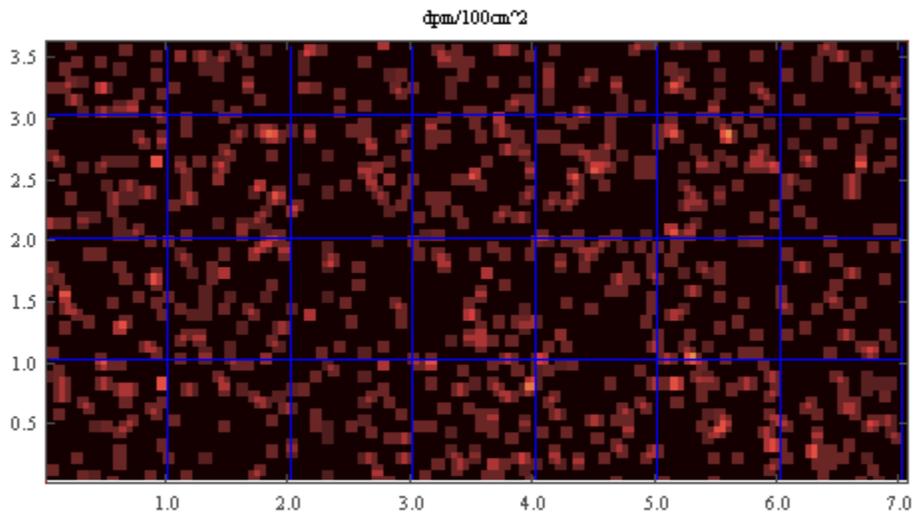


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

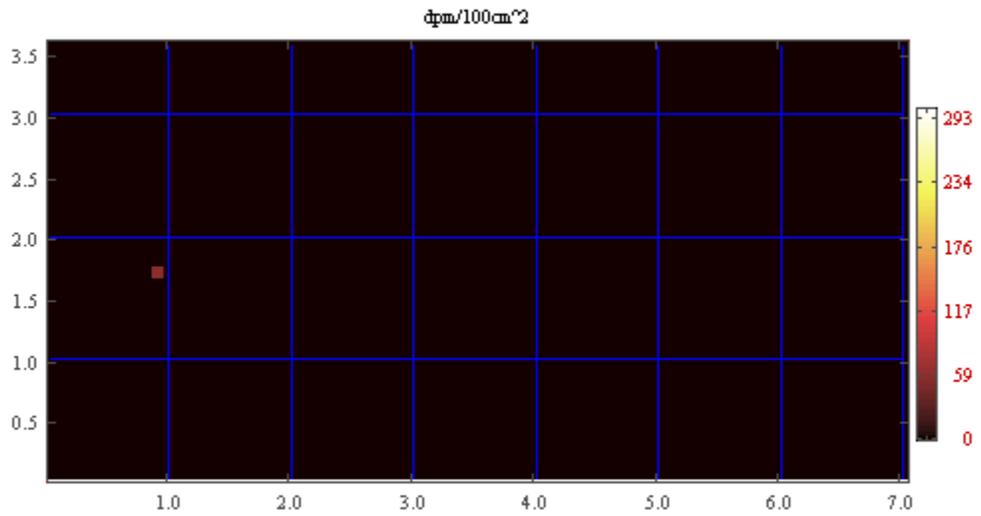


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA1931A
Survey Date:	December 9, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

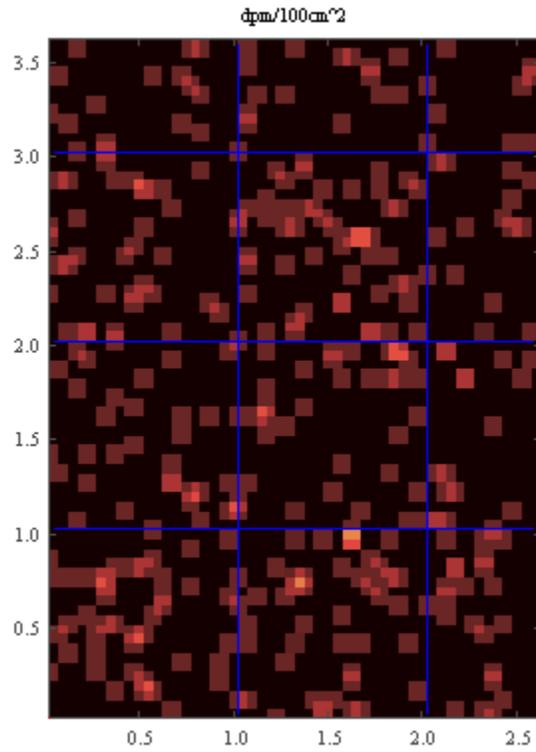


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

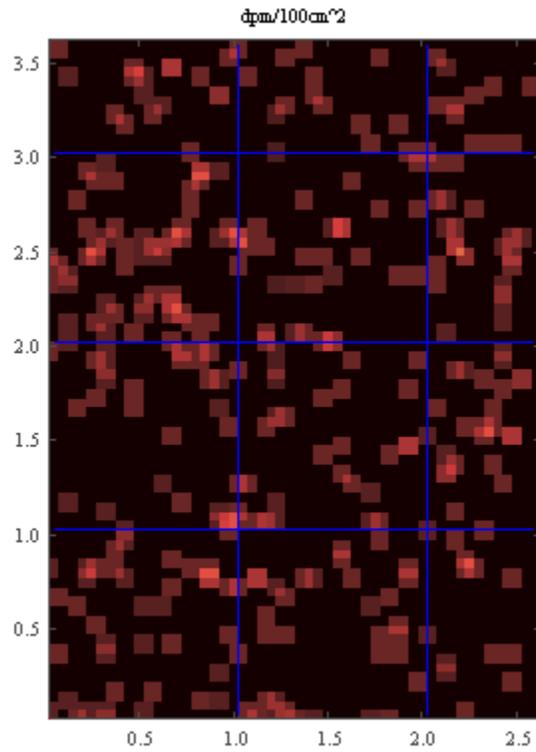


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

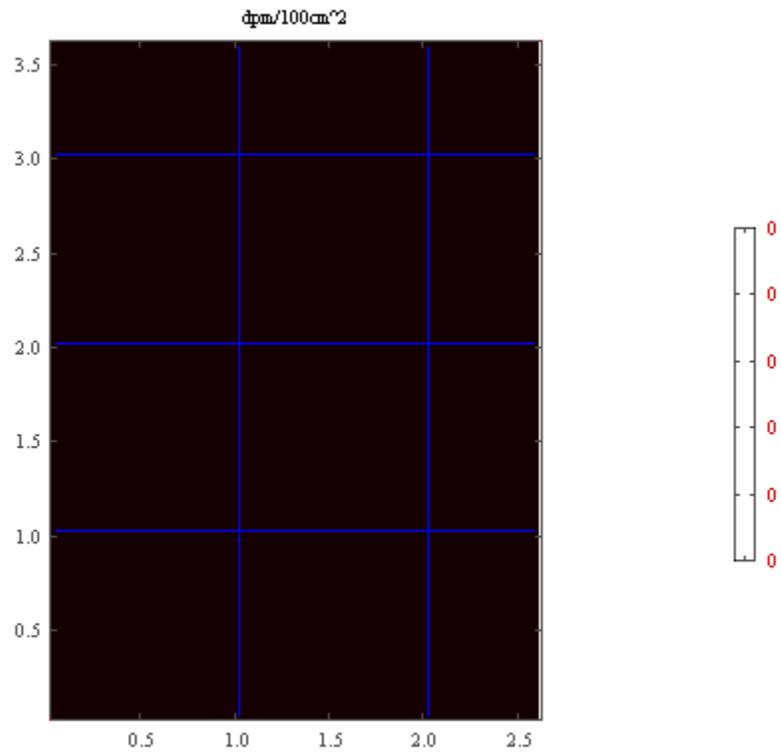


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2001A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	215 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.08 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

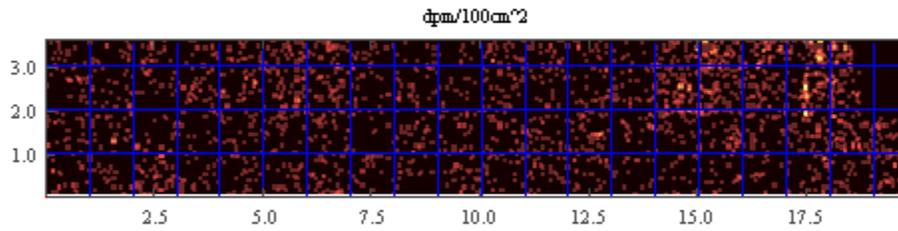


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

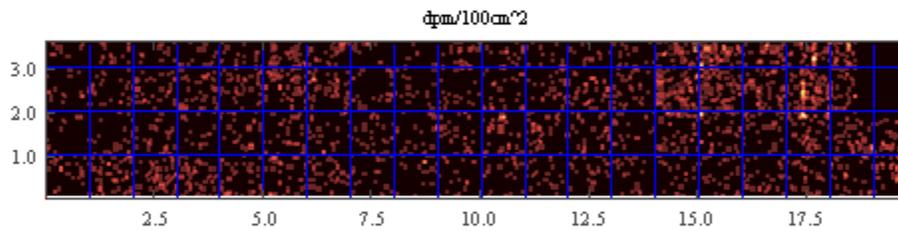


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

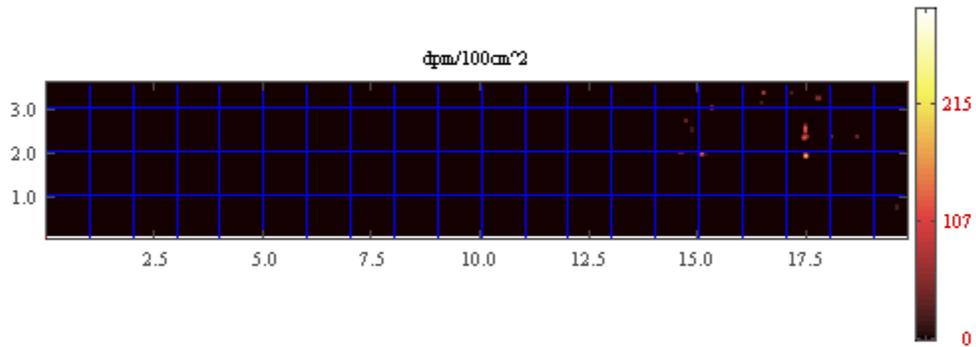


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

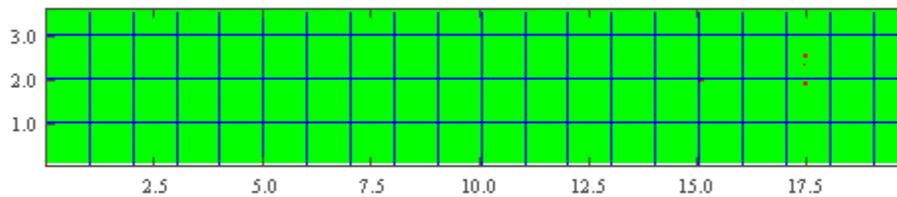


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	215	76	(1745,190)	(0,5)	N/A		
Spot	137	74	(1740,230)	(5,45)	N/A		
Spot	128	27	(1510,195)	(5,10)	N/A		
Spot	117	74	(1740,250)	(5,65)	N/A		
Spot	117	74	(1740,355)	(5,170)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2011A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	234 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.07 m ²

This survey is not position correlated.

Primary Detector:

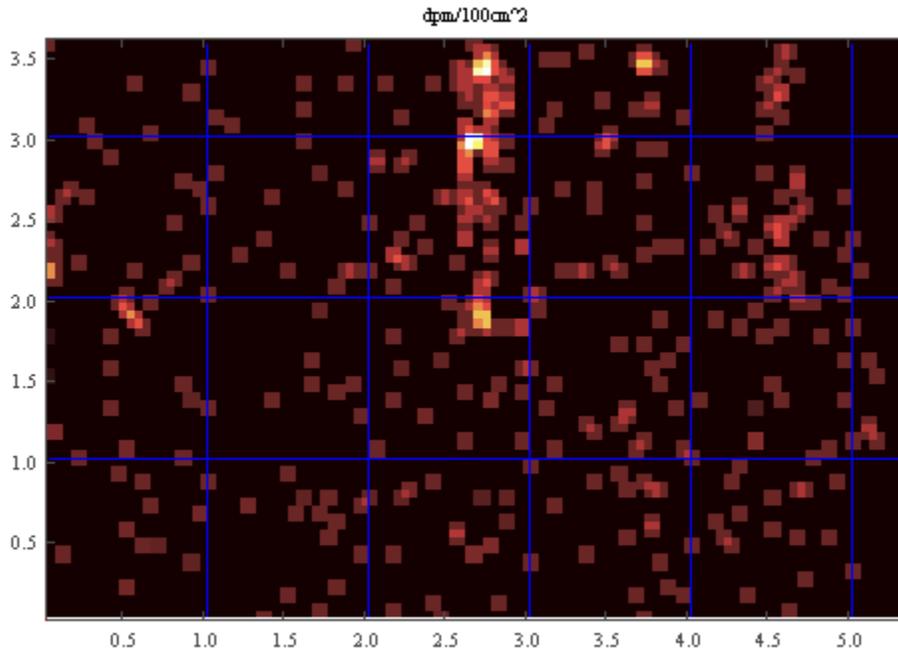


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

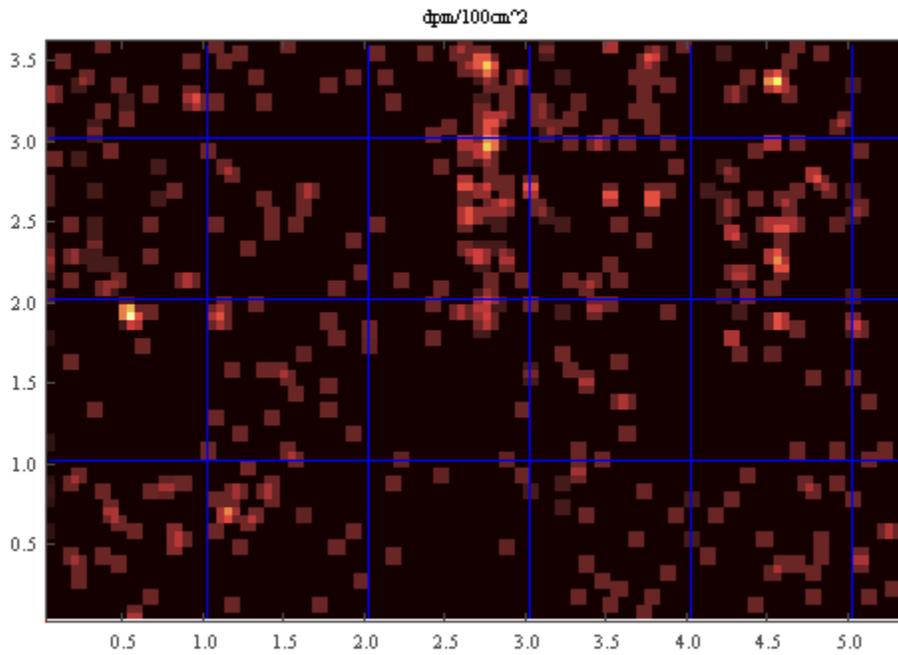


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

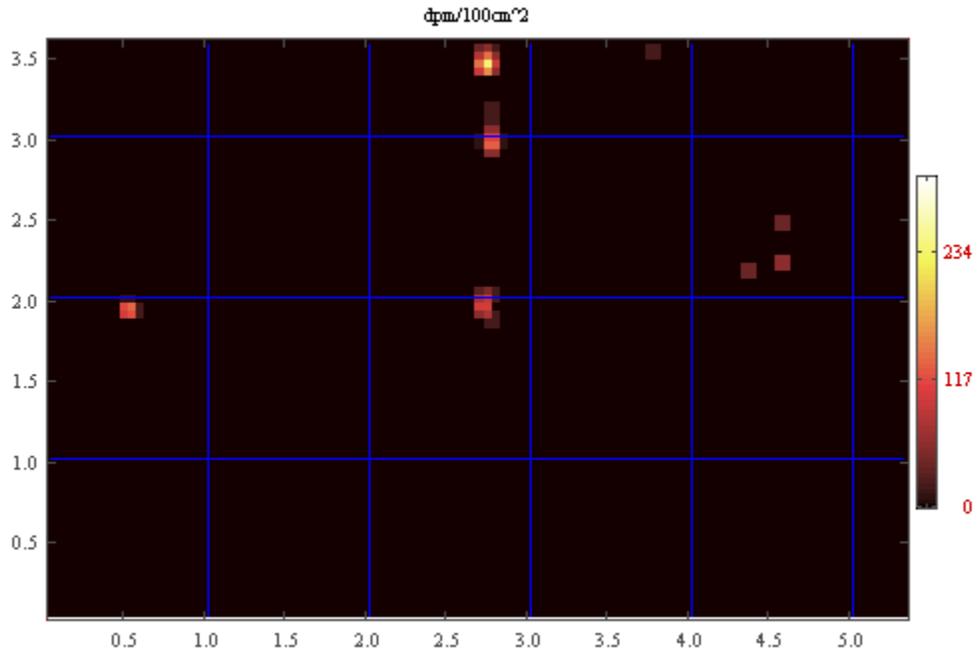


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

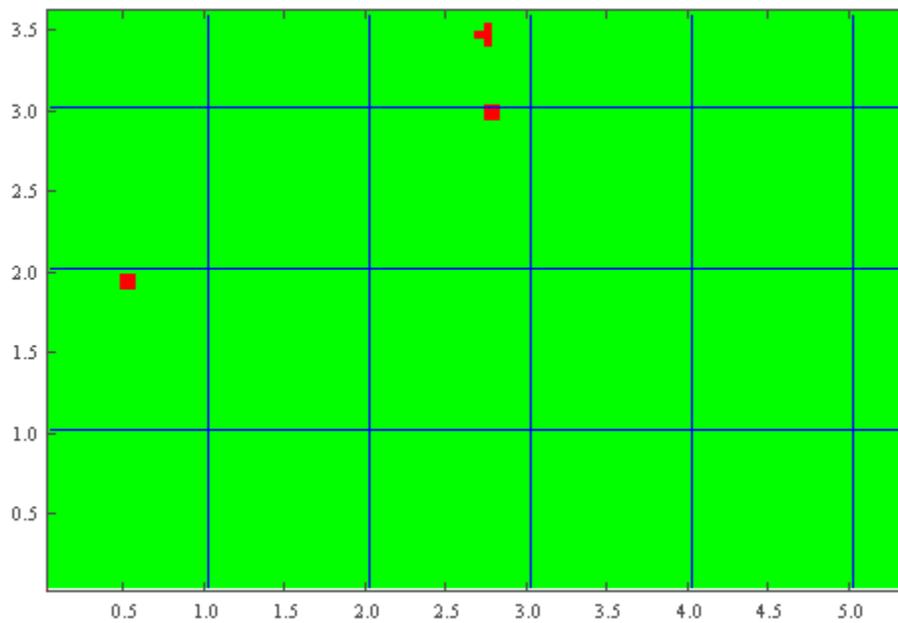


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	234	106	(275,345)	(0,160)	N/A		
Spot	131	62	(55,195)	(0,10)	N/A		
Spot	128	106	(280,295)	(5,110)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2031A
Survey Date:	March 4, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	383 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.44 m ²

This survey is not position correlated.

Primary Detector:

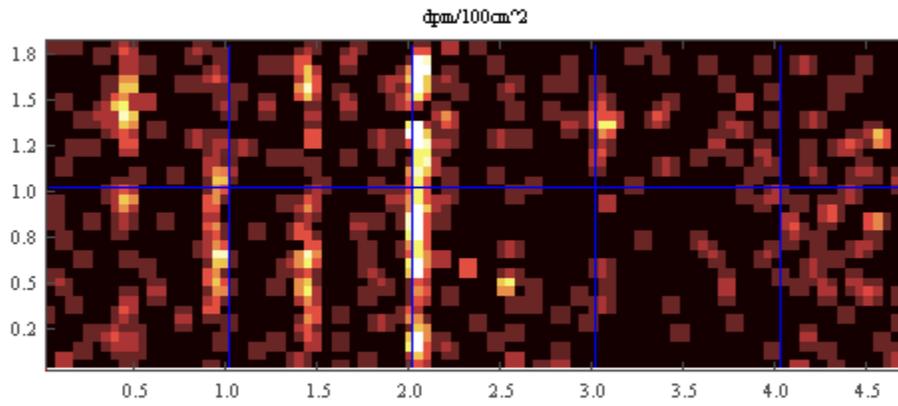


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

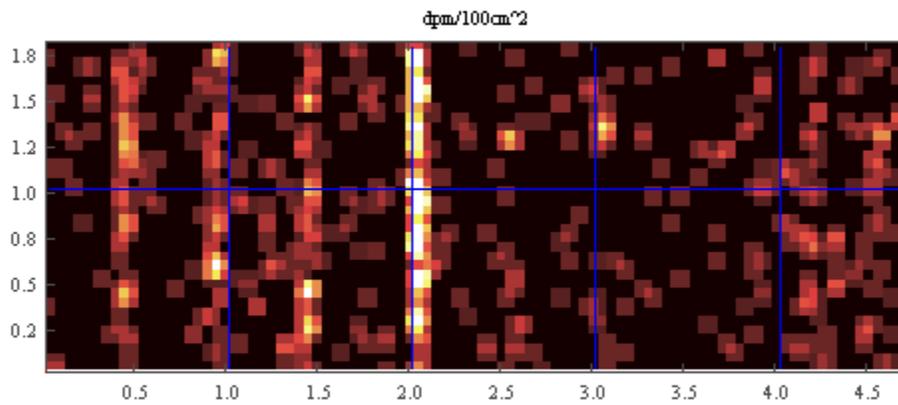


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

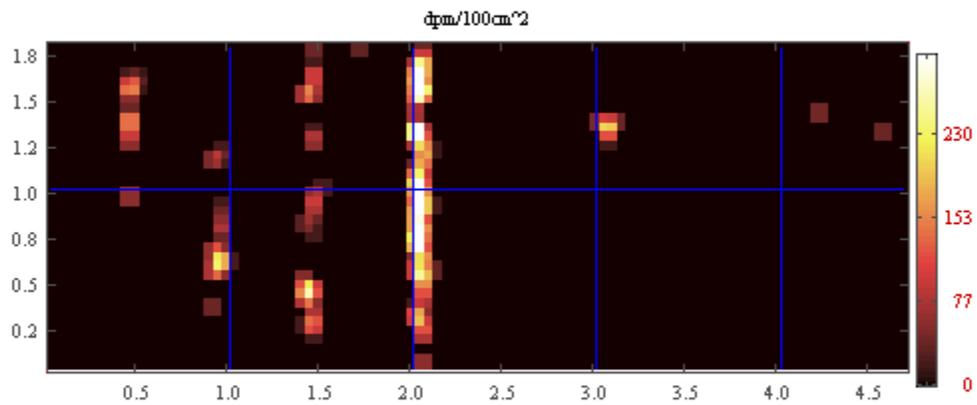


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

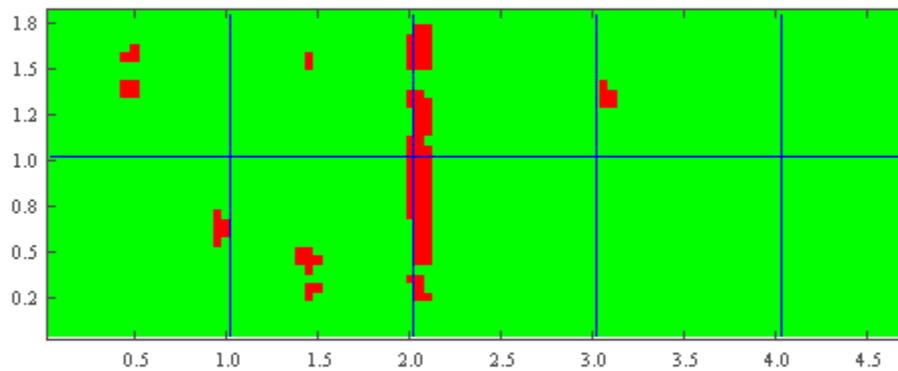


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	383	42	(205,155)	(0,150)	N/A		
Spot	363	42	(205,130)	(0,125)	N/A		
Spot	362	42	(205,75)	(0,70)	N/A		
Spot	344	42	(205,90)	(0,85)	N/A		
Spot	320	42	(205,105)	(0,100)	N/A		
Spot	267	30	(145,45)	(0,40)	N/A		
Spot	252	42	(205,55)	(0,50)	N/A		
Spot	249	42	(205,170)	(0,165)	N/A		
Spot	233	20	(95,60)	(0,55)	N/A		
Spot	204	62	(305,135)	(0,130)	N/A		
Spot	191	42	(205,30)	(0,25)	N/A		
Spot	151	30	(145,155)	(0,150)	N/A		
Spot	150	10	(50,155)	(5,150)	N/A		
Spot	137	10	(45,140)	(0,135)	N/A		
Spot	137	30	(145,30)	(0,25)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2101A
Survey Date:	November 22, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

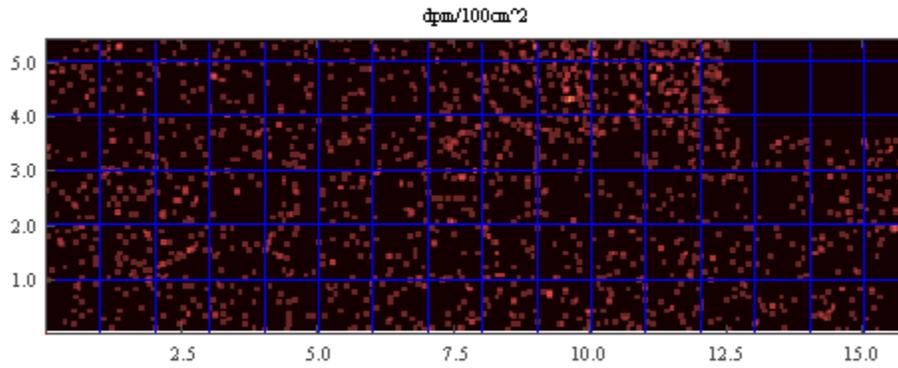


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

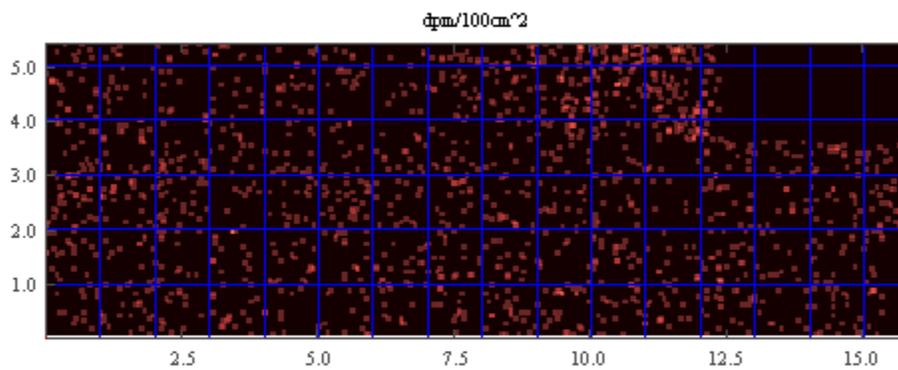


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

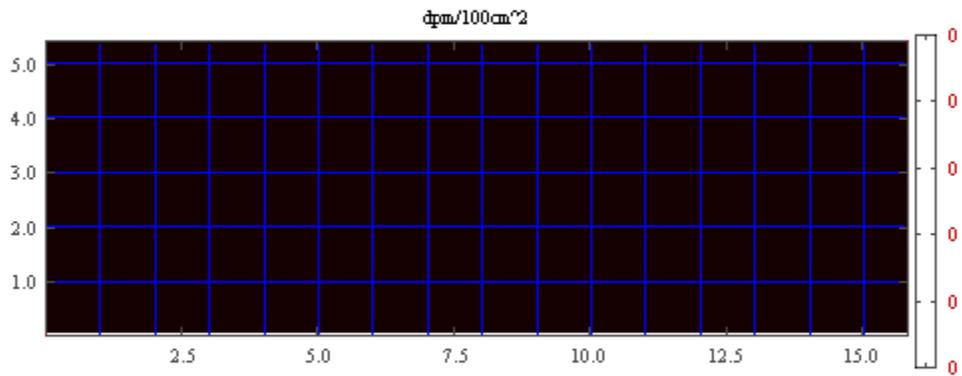


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2111A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	117 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

This survey is not position correlated.

Primary Detector:

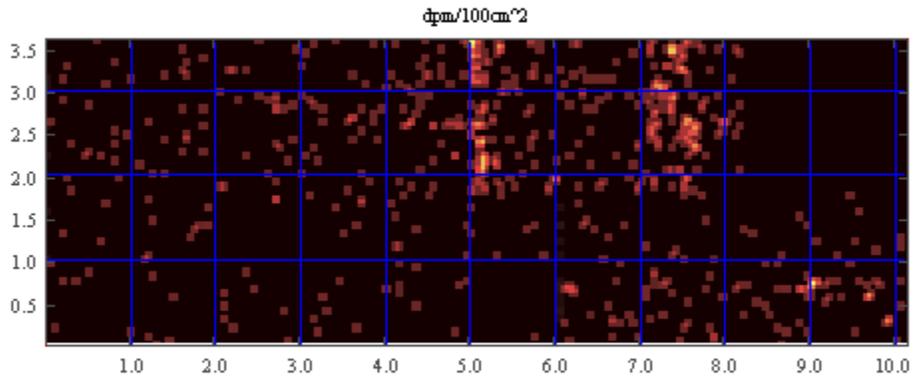


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

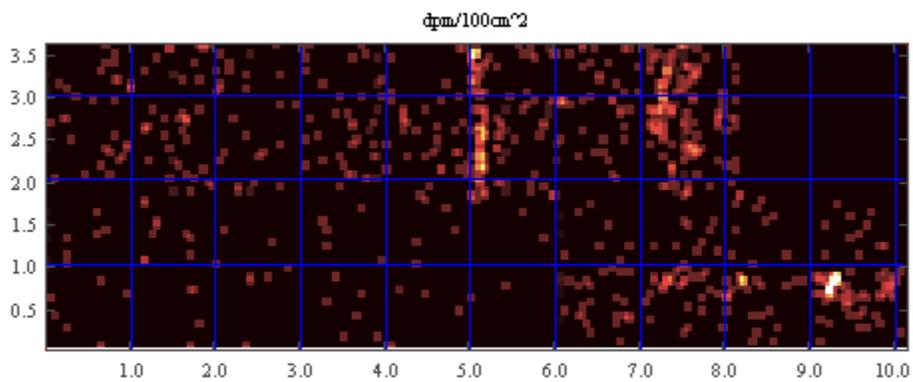


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

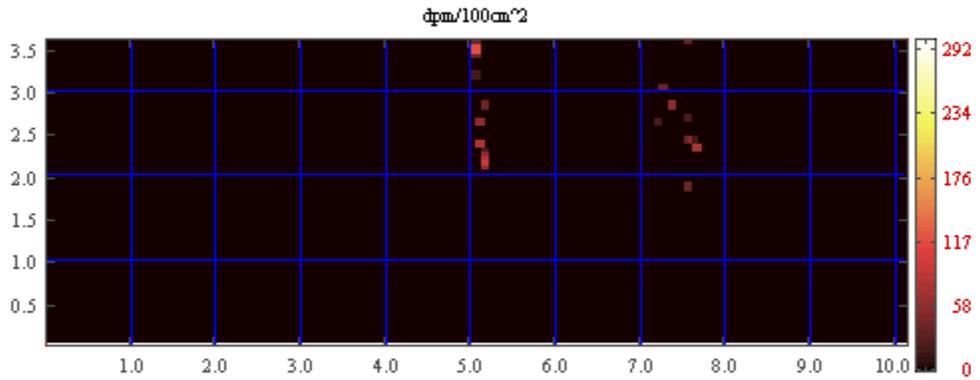


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

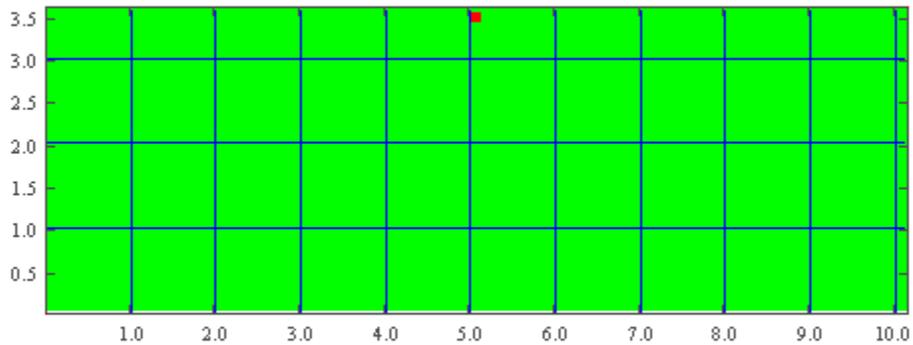


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	117	77	(505,345)	(0,160)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2121A
Survey Date:	November 29, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

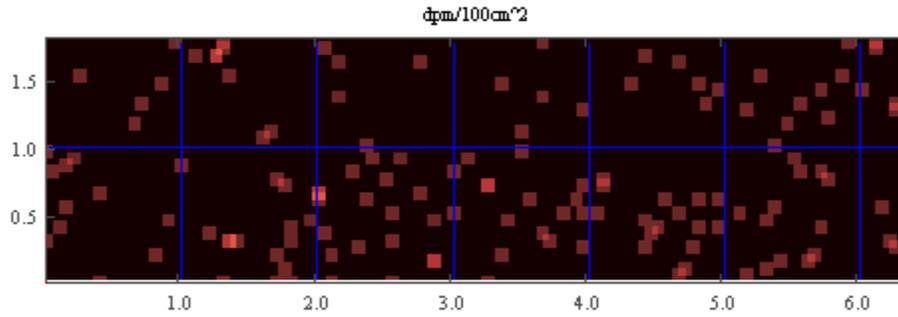


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

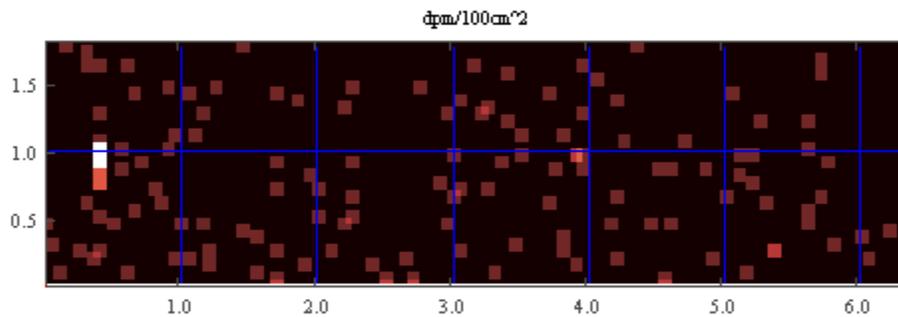


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

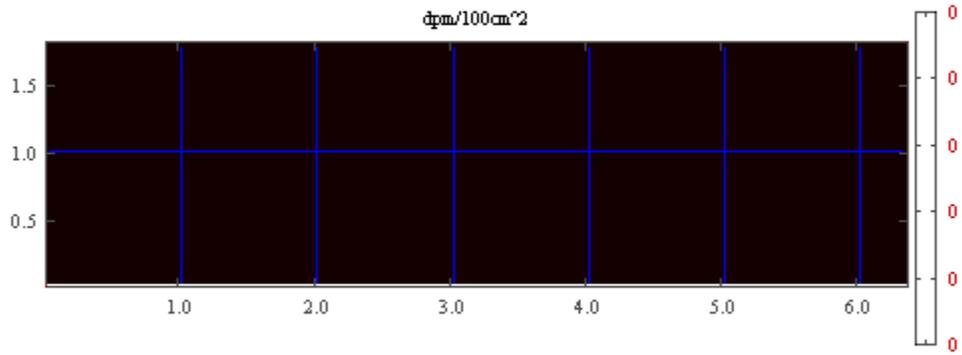


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2131A
Survey Date:	March 4, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	354 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.36 m ²

This survey is not position correlated.

Primary Detector:

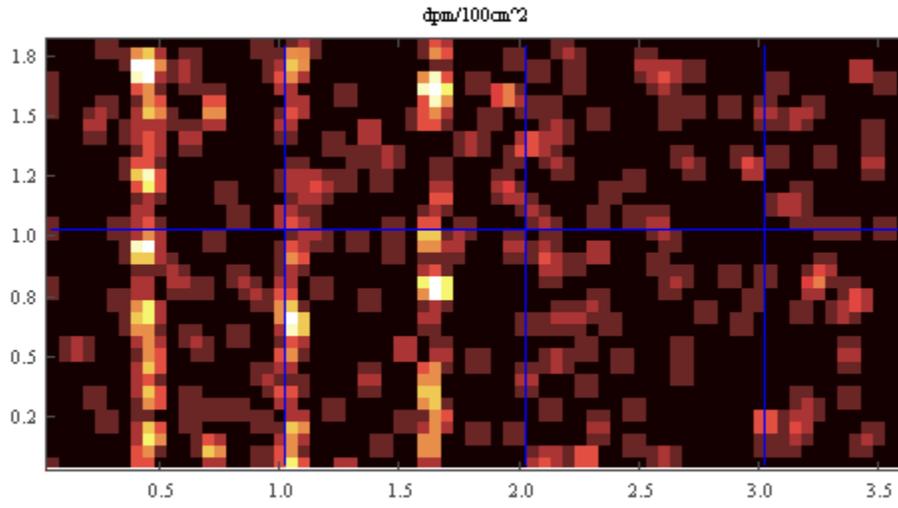


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

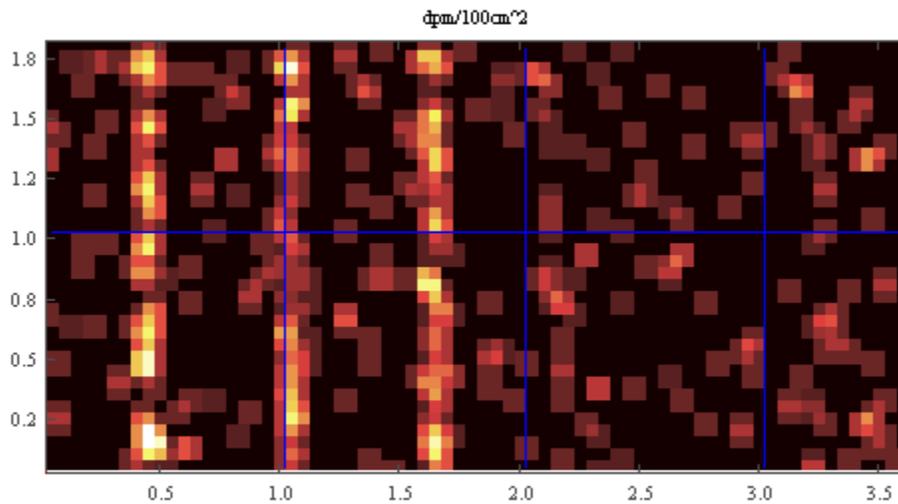


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

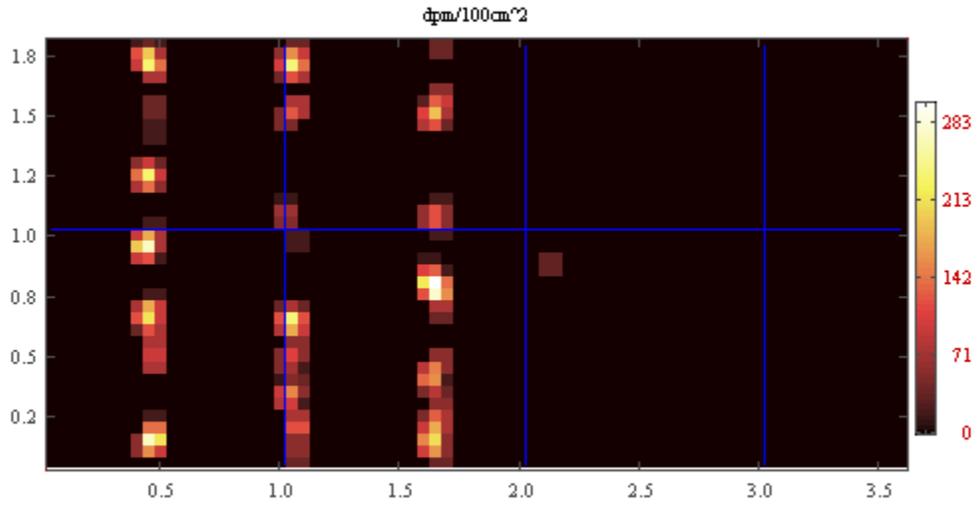


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

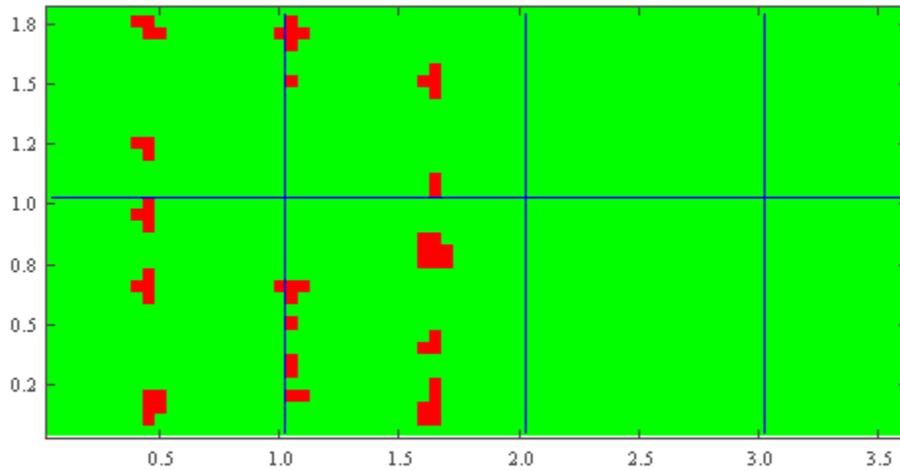


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	354	34	(165,80)	(0,75)	N/A		
Spot	273	10	(45,15)	(0,10)	N/A		
Spot	273	10	(45,95)	(0,90)	N/A		
Spot	240	22	(105,170)	(0,165)	N/A		
Spot	237	22	(105,65)	(0,60)	N/A		
Spot	234	10	(45,125)	(0,120)	N/A		
Spot	234	10	(45,170)	(0,165)	N/A		
Spot	215	10	(45,65)	(0,60)	N/A		
Spot	209	34	(165,15)	(0,10)	N/A		
Spot	189	34	(165,150)	(0,145)	N/A		
Spot	155	34	(165,40)	(0,35)	N/A		
Spot	154	22	(105,35)	(0,30)	N/A		
Spot	126	22	(105,150)	(0,145)	N/A		
Spot	121	34	(165,110)	(0,105)	N/A		
Spot	117	22	(105,20)	(0,15)	N/A		
Spot	112	22	(105,50)	(0,45)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2201A
Survey Date:	November 22, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	169 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

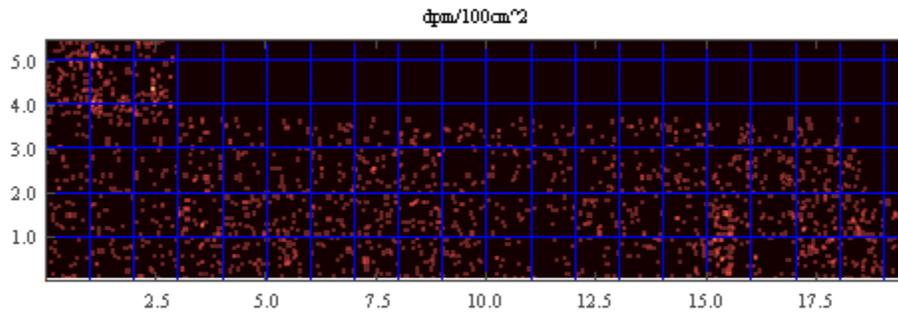


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

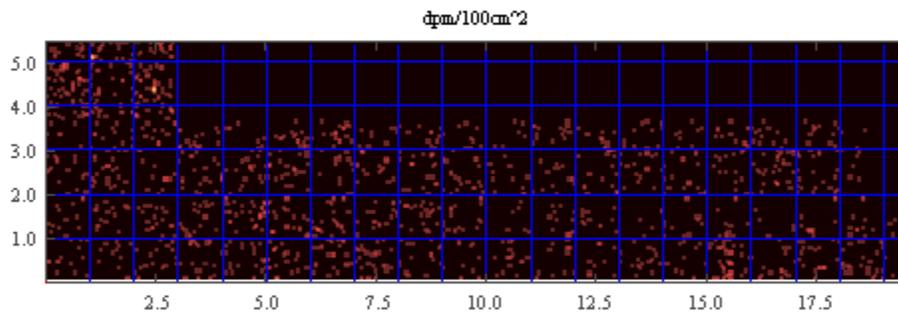


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

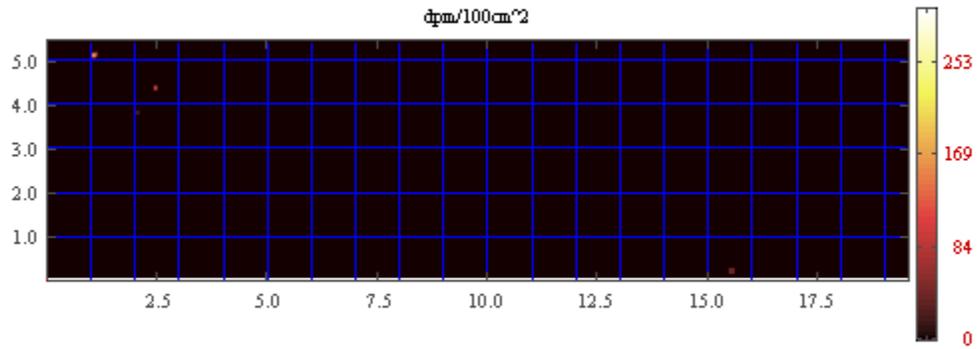


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

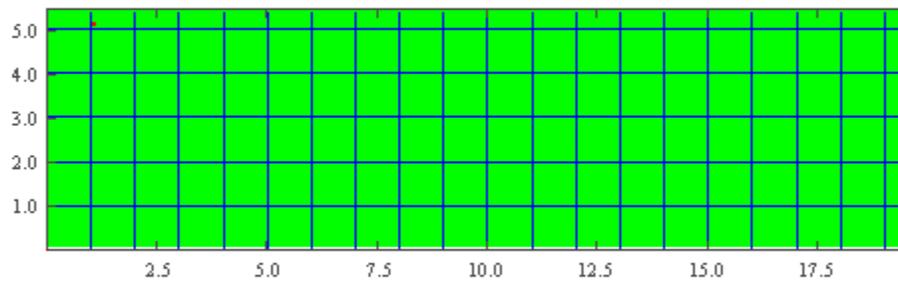


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	169	27	(105,505)	(0,135)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2211A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

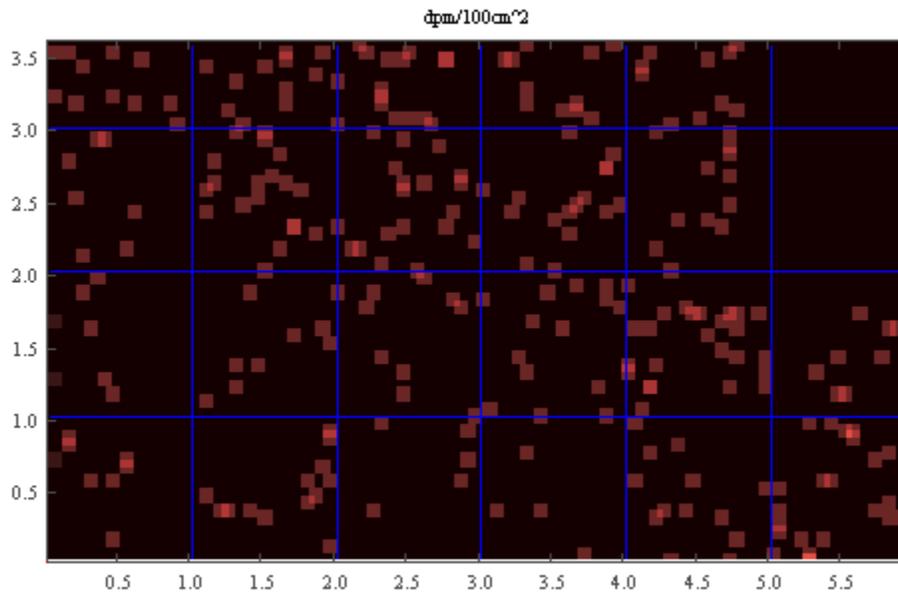


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

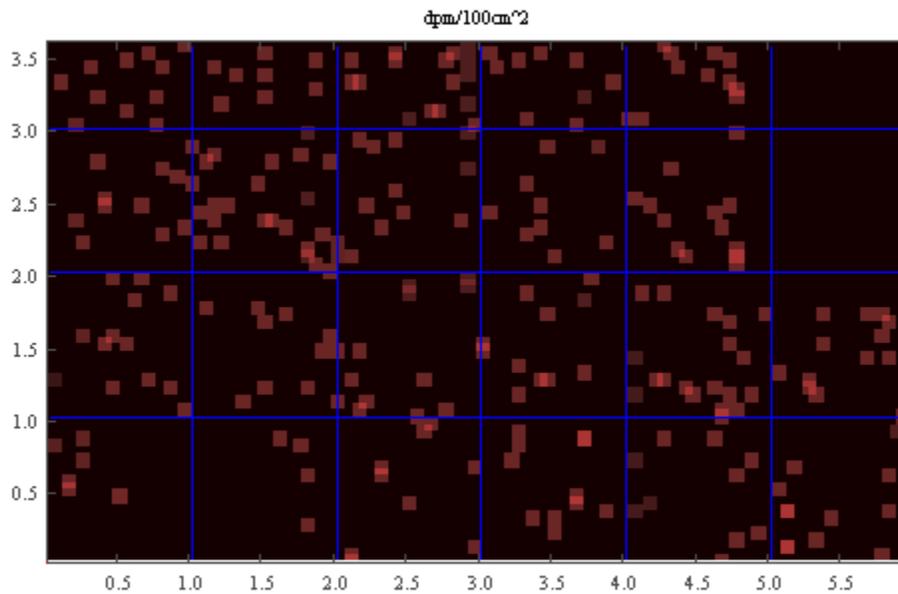


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

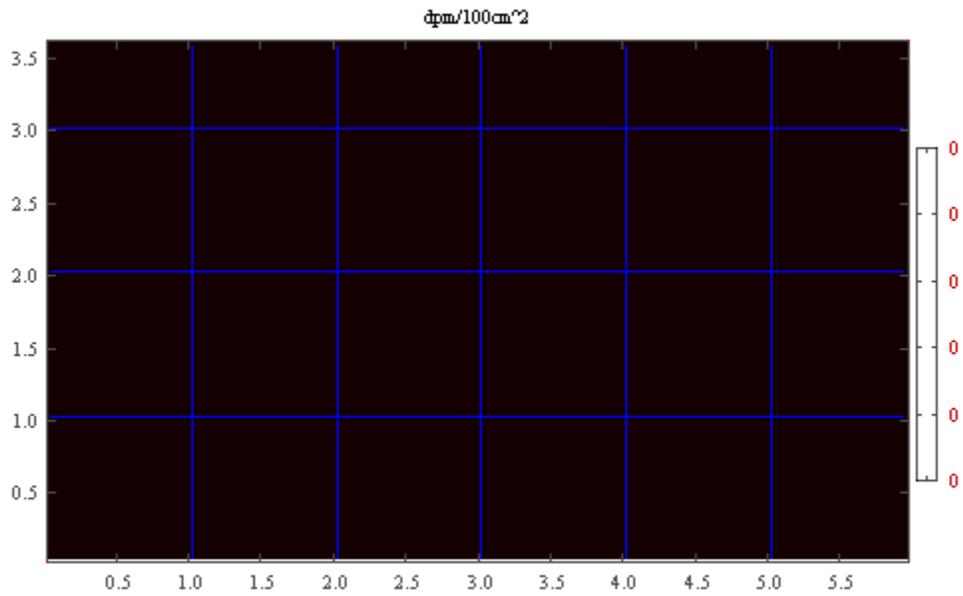


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2221A
Survey Date:	November 29, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

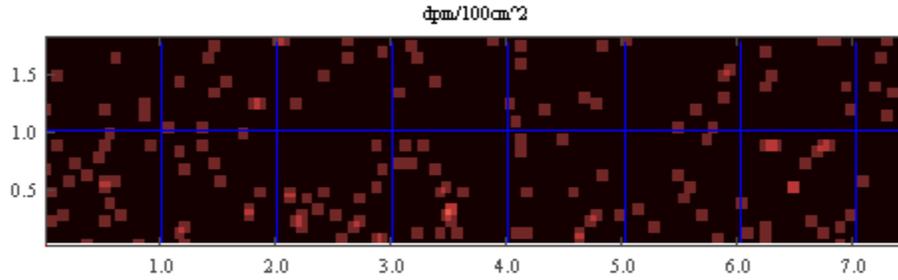


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

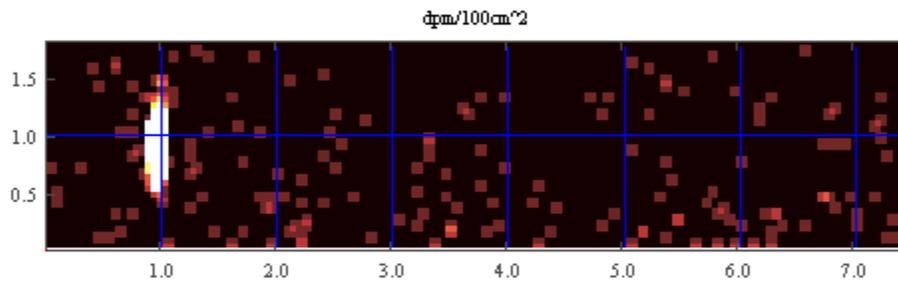


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

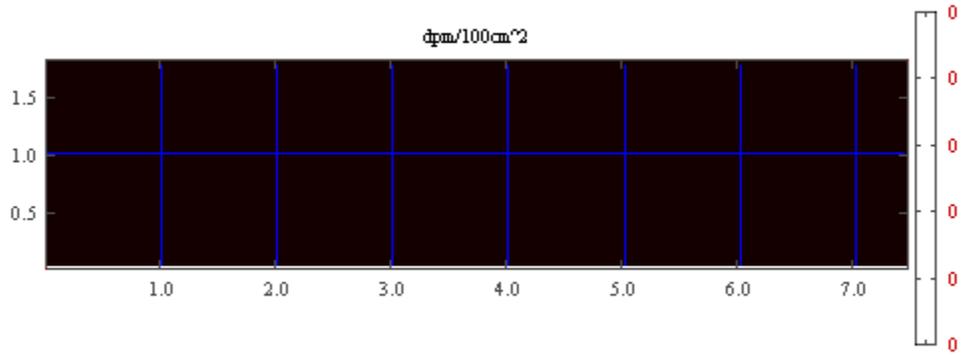


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2221B
Survey Date:	March 5, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

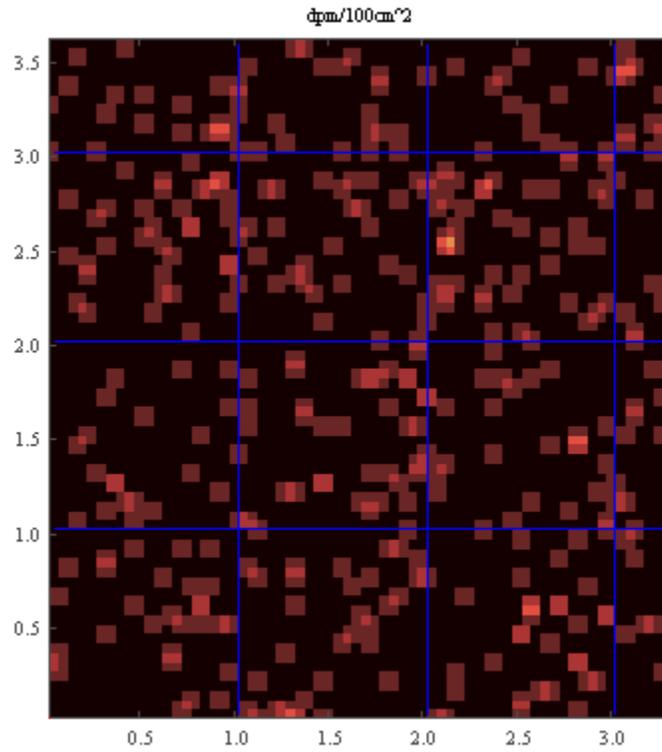


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

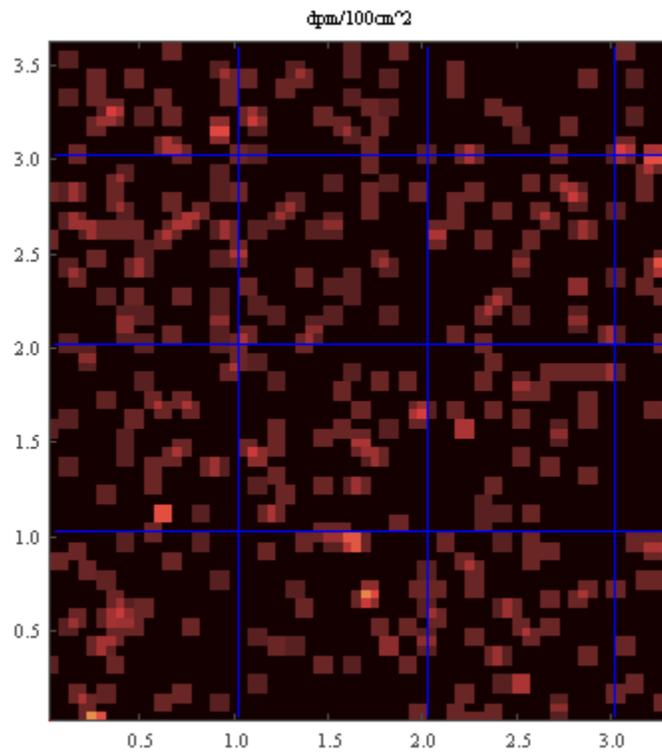


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

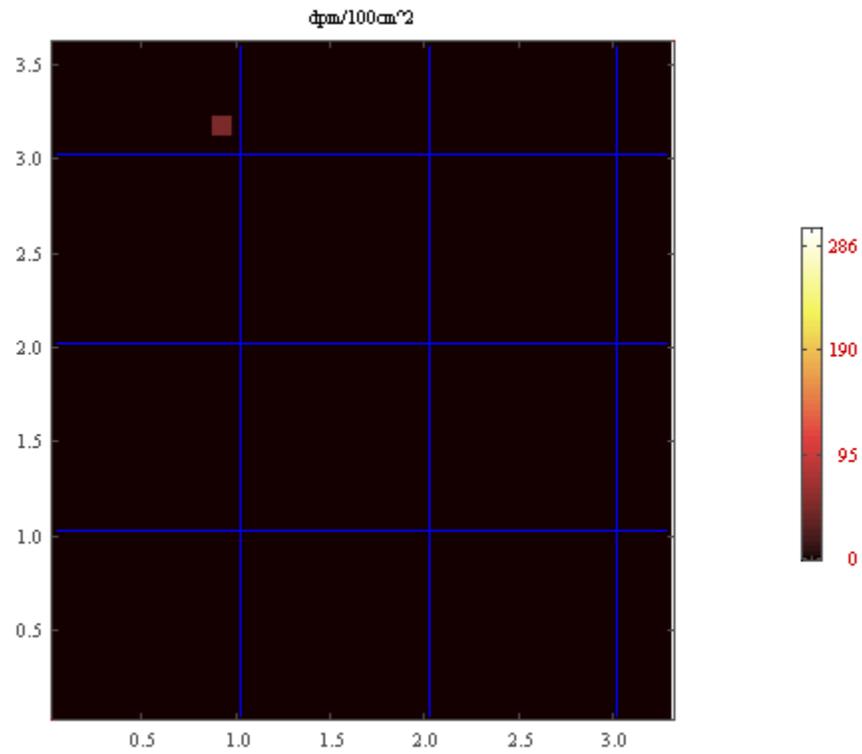


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2231A
Survey Date:	March 5, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	351 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.03 m ²

This survey is not position correlated.

Primary Detector:

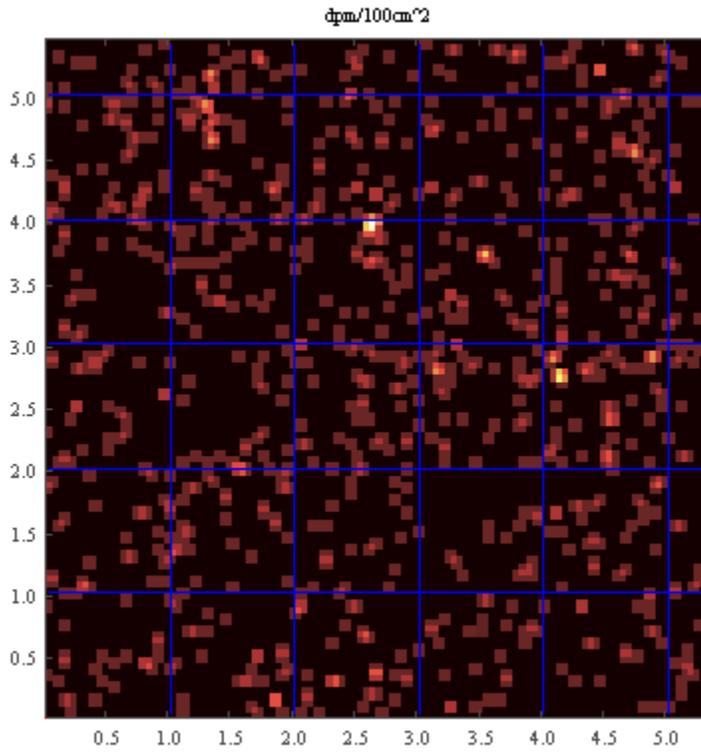


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

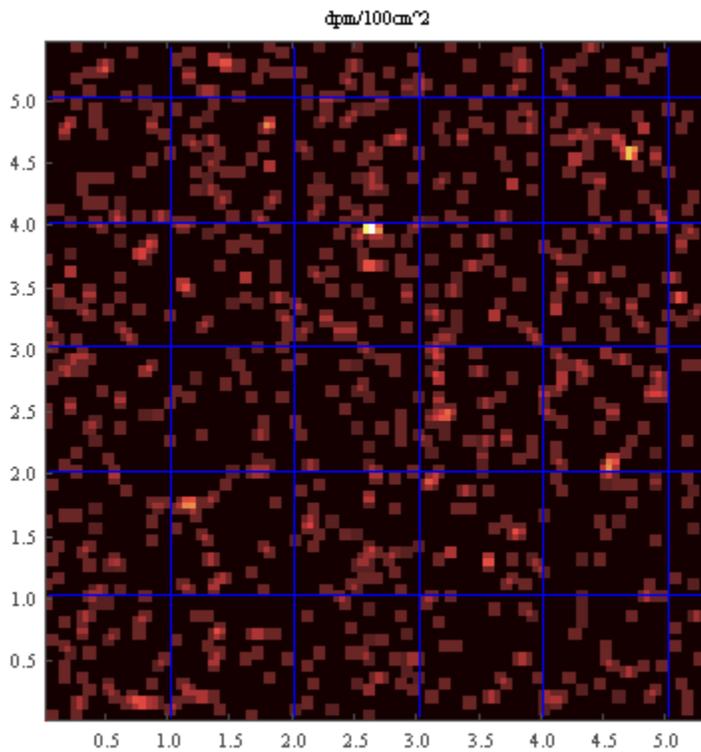


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

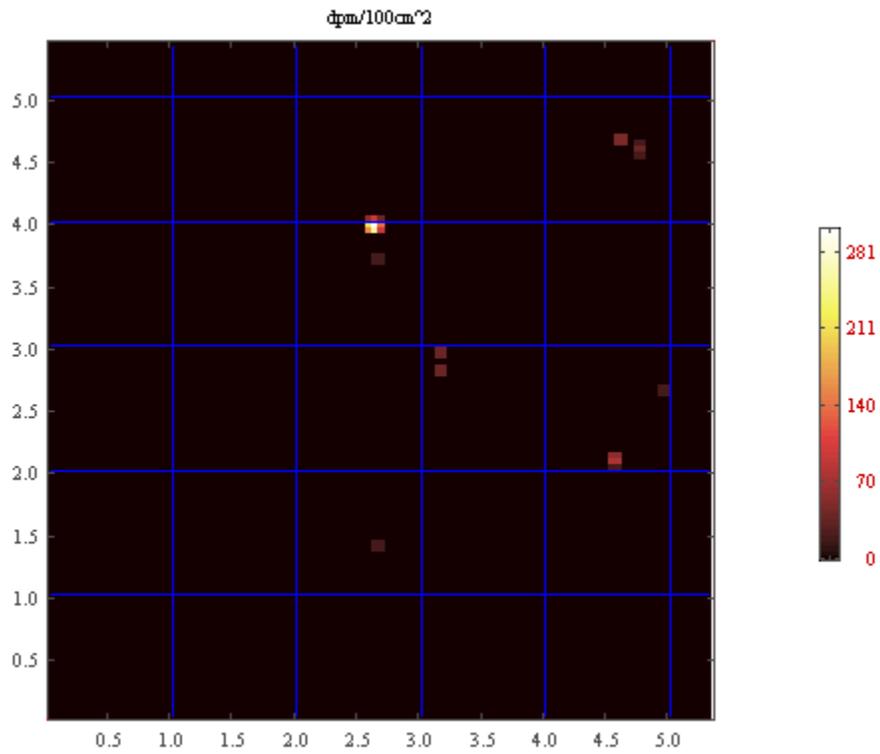


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

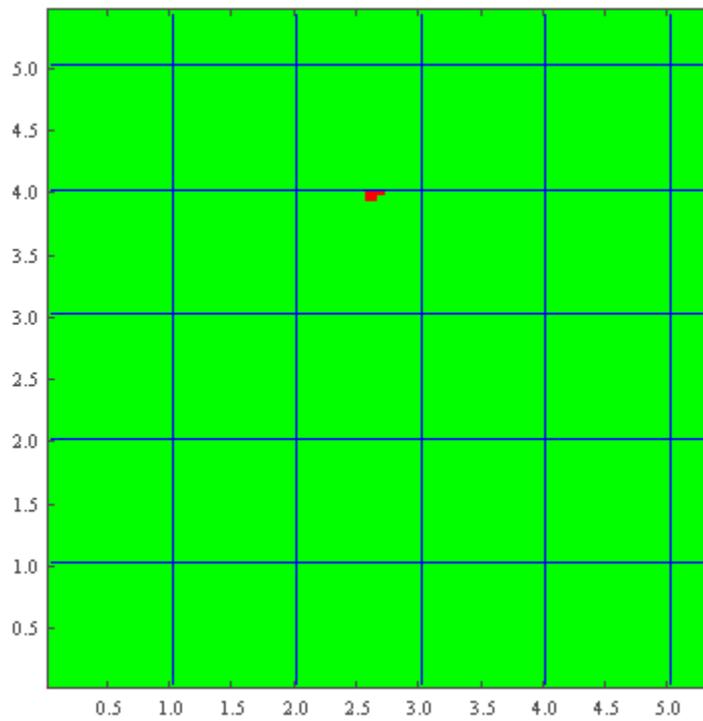


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	351	266	(265,400)	(0,30)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2301A
Survey Date:	November 22, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

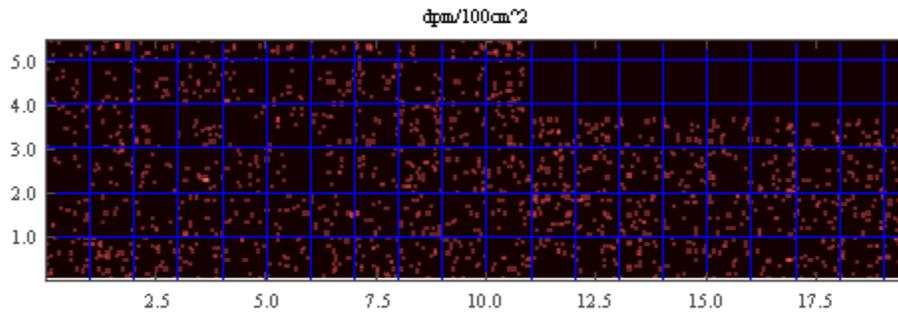


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

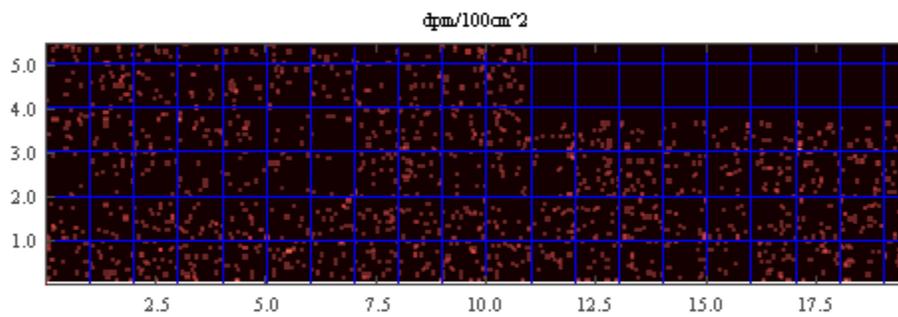


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

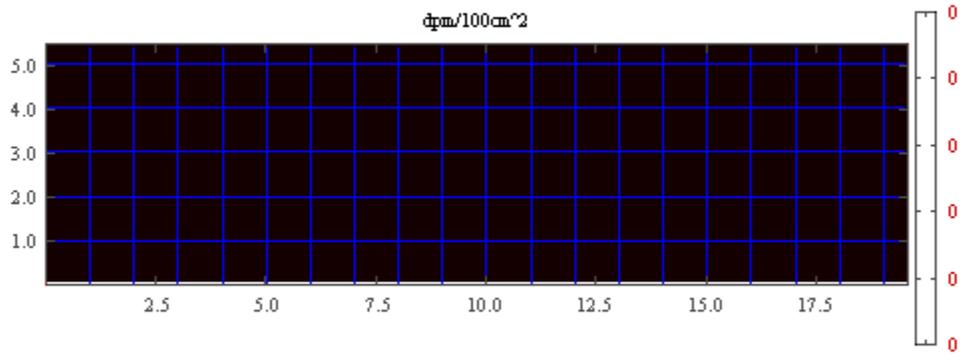


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2311A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

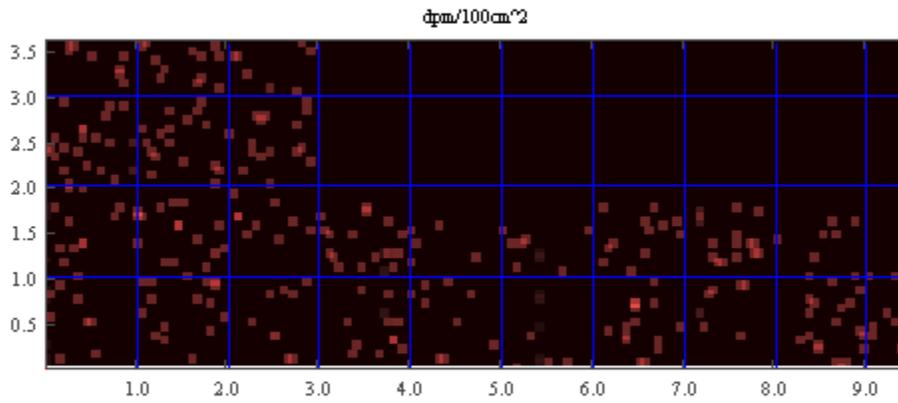


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

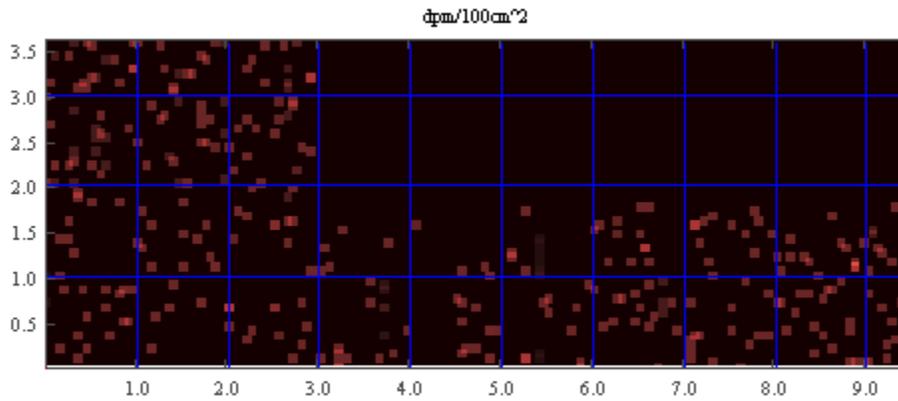


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

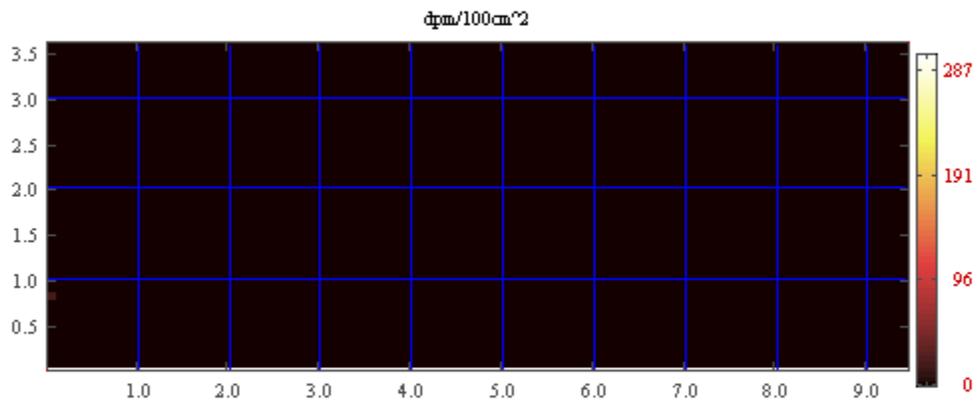


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2321A
Survey Date:	November 29, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

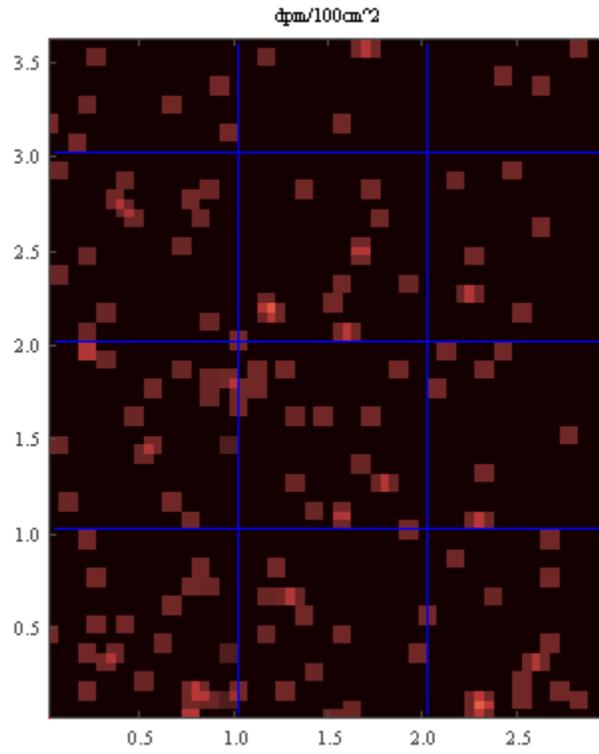


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

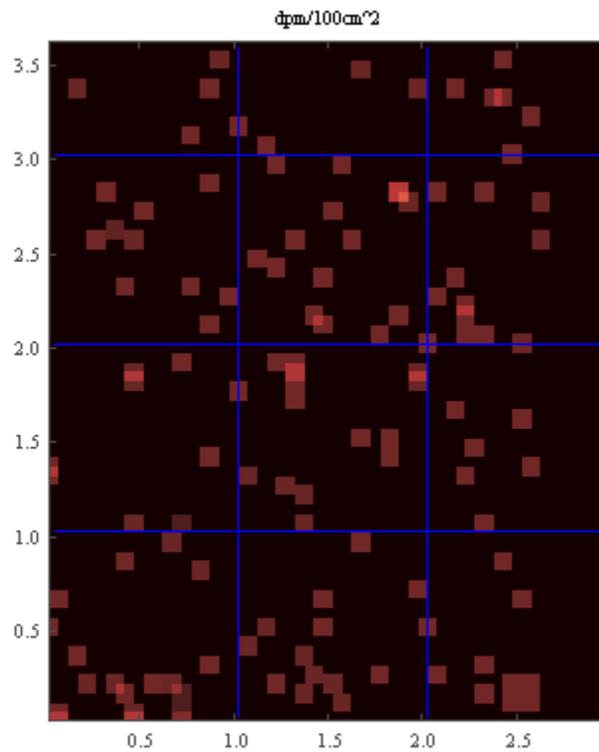


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

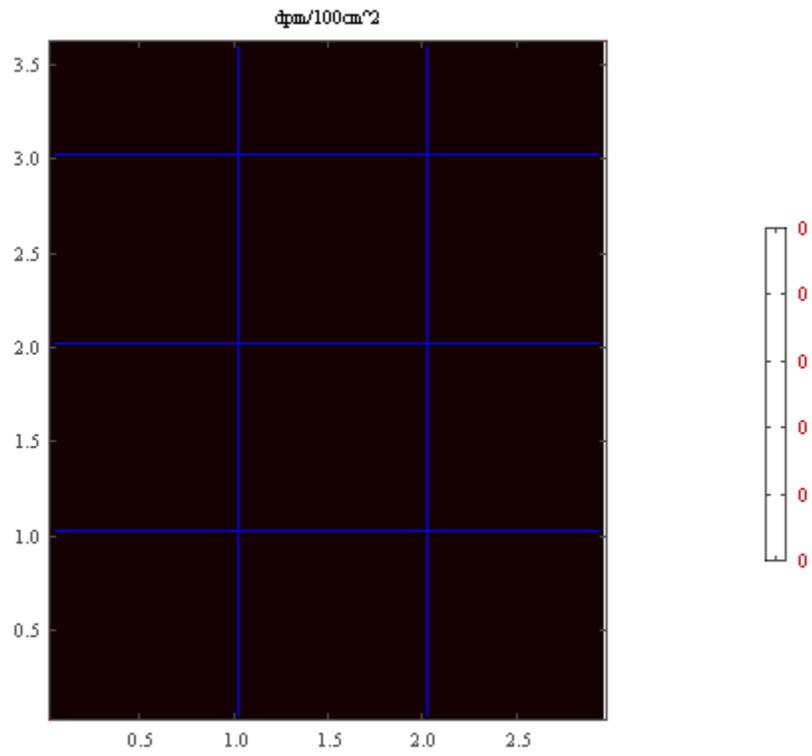


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2321B
Survey Date:	March 5, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

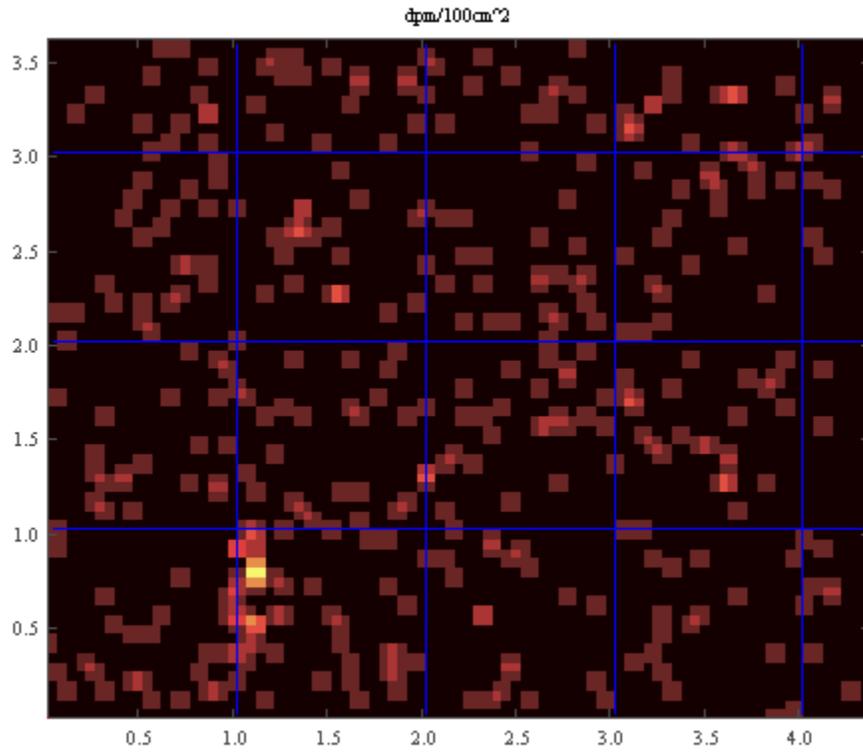


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

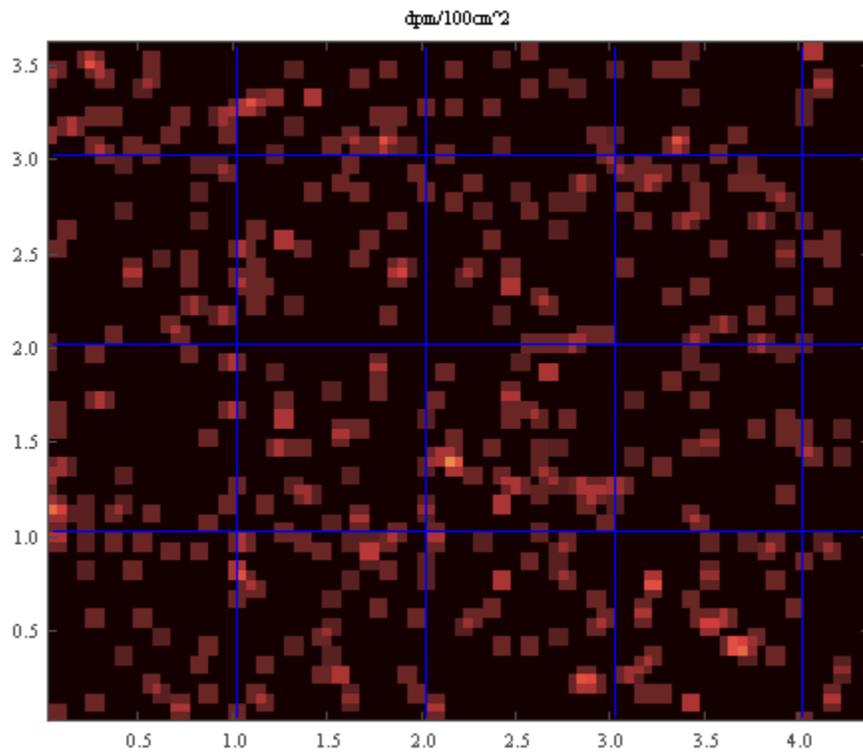


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

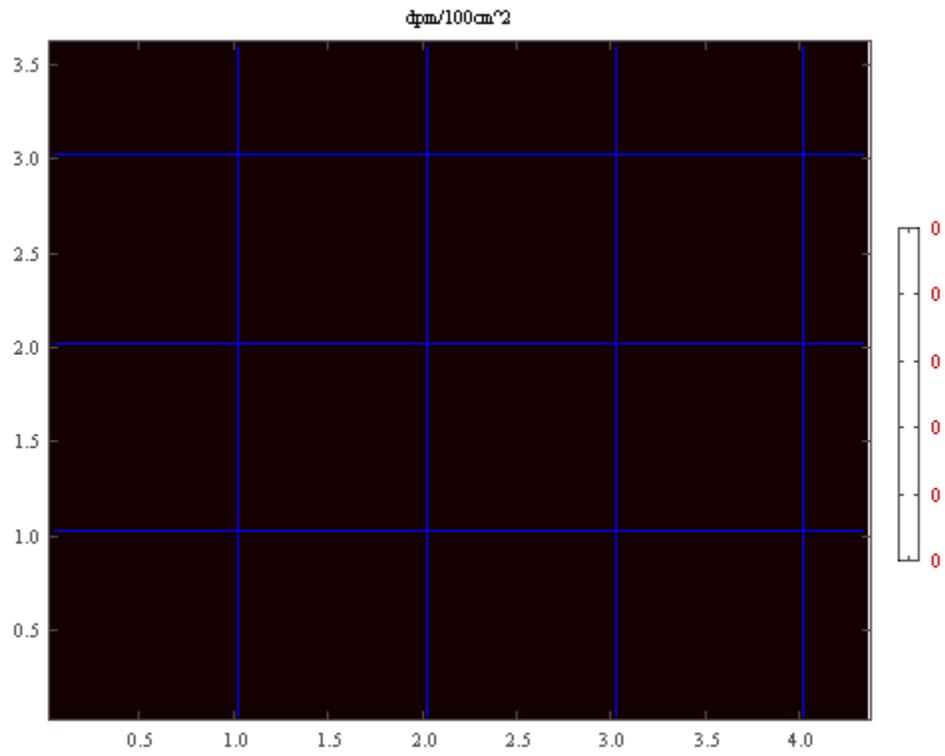


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2331A
Survey Date:	March 7, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	190 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

This survey is not position correlated.

Primary Detector:

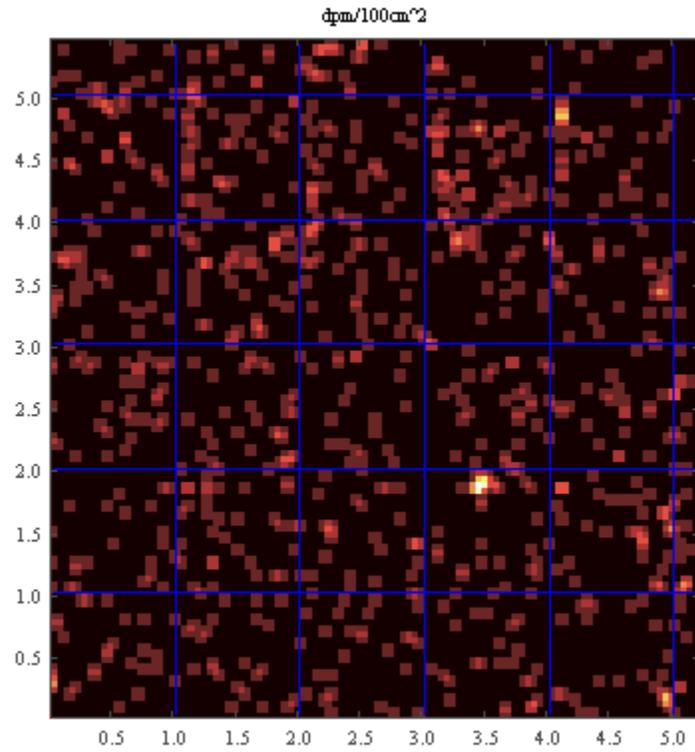


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

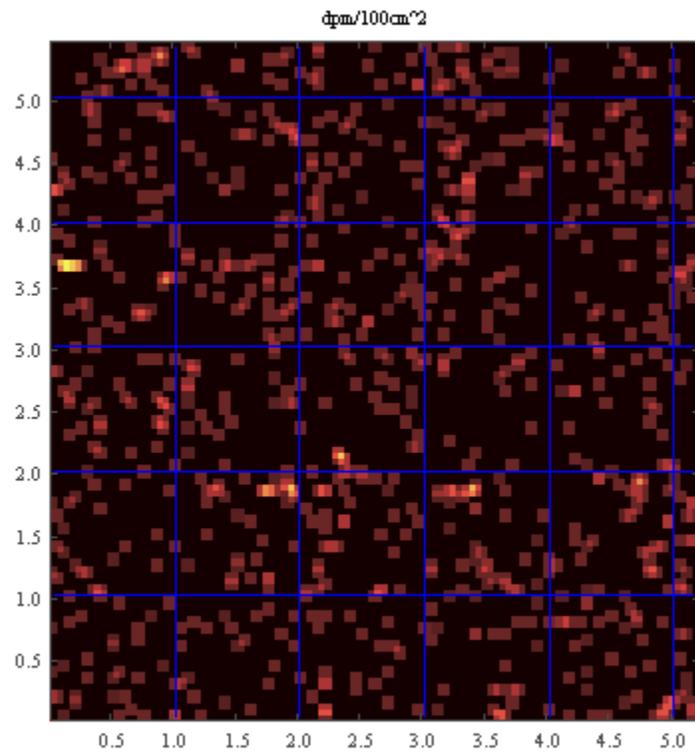


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

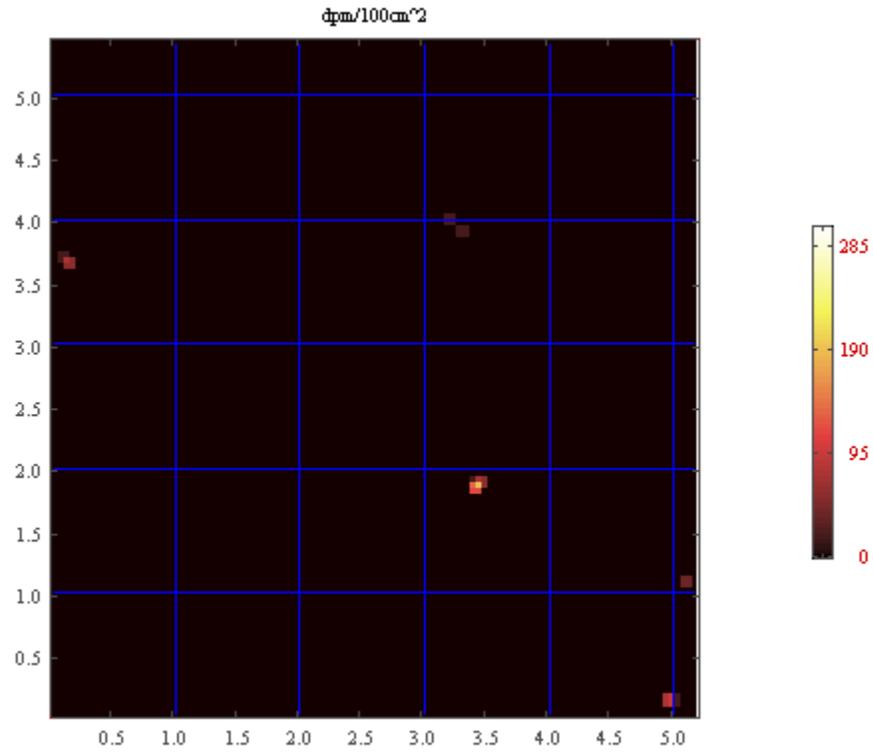


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

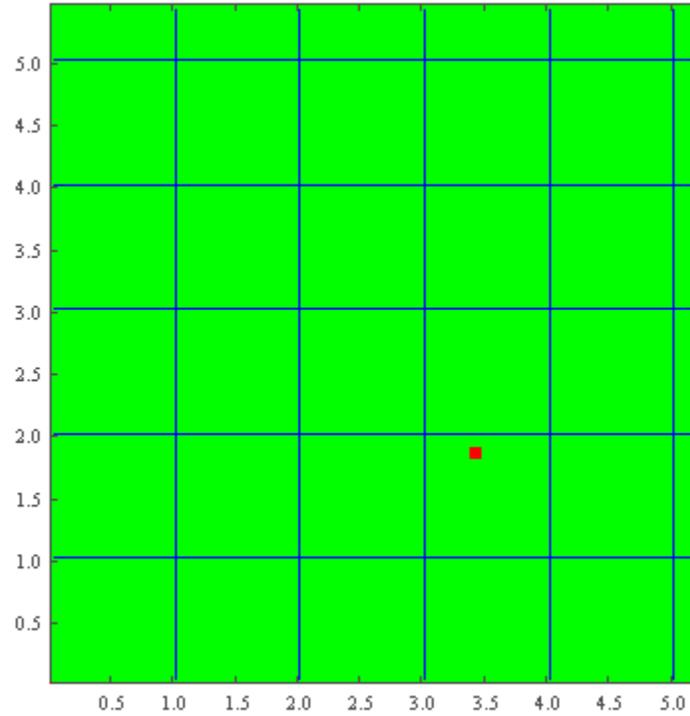


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	190	174	(345,190)	(0,0)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2401A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

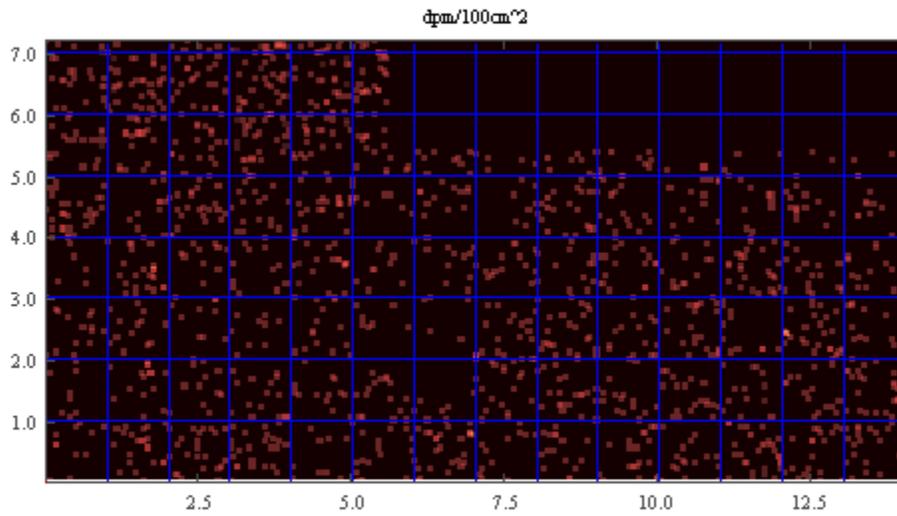


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

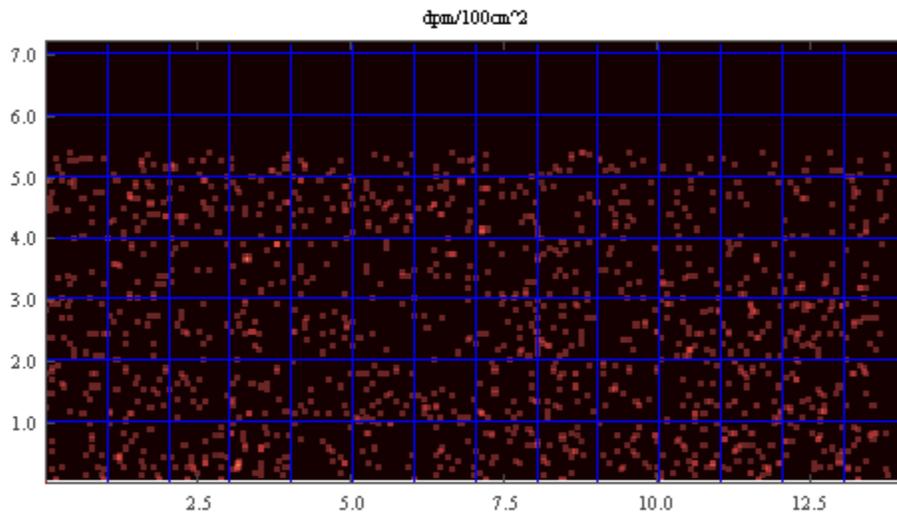


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

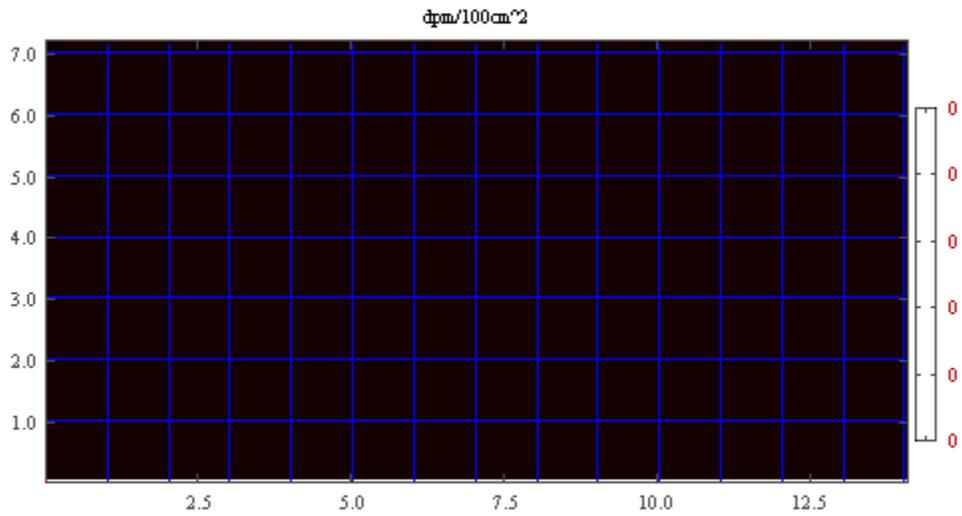


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2411A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 0.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

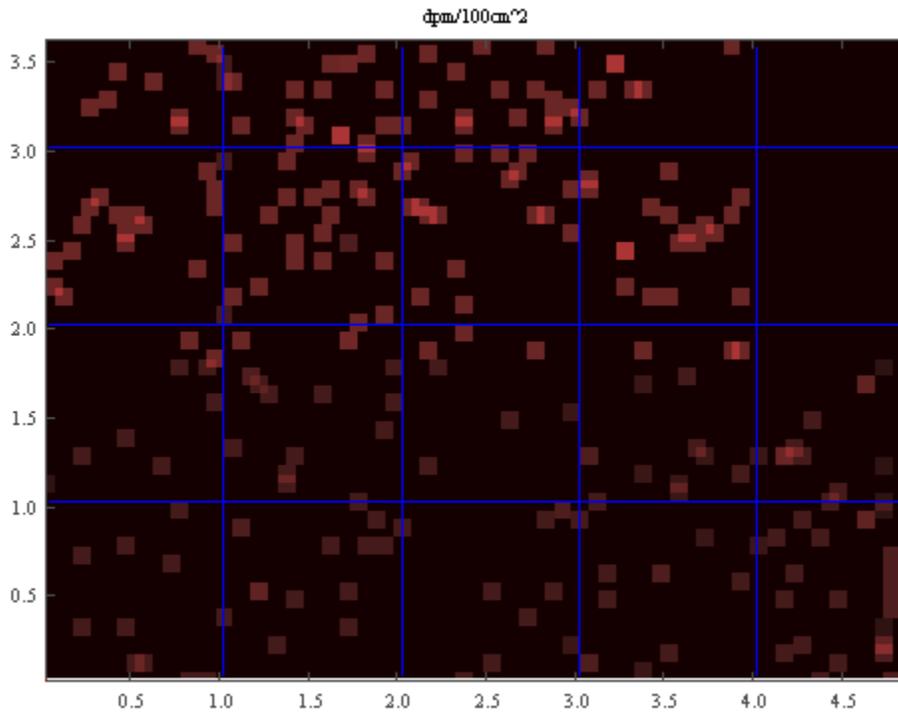


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

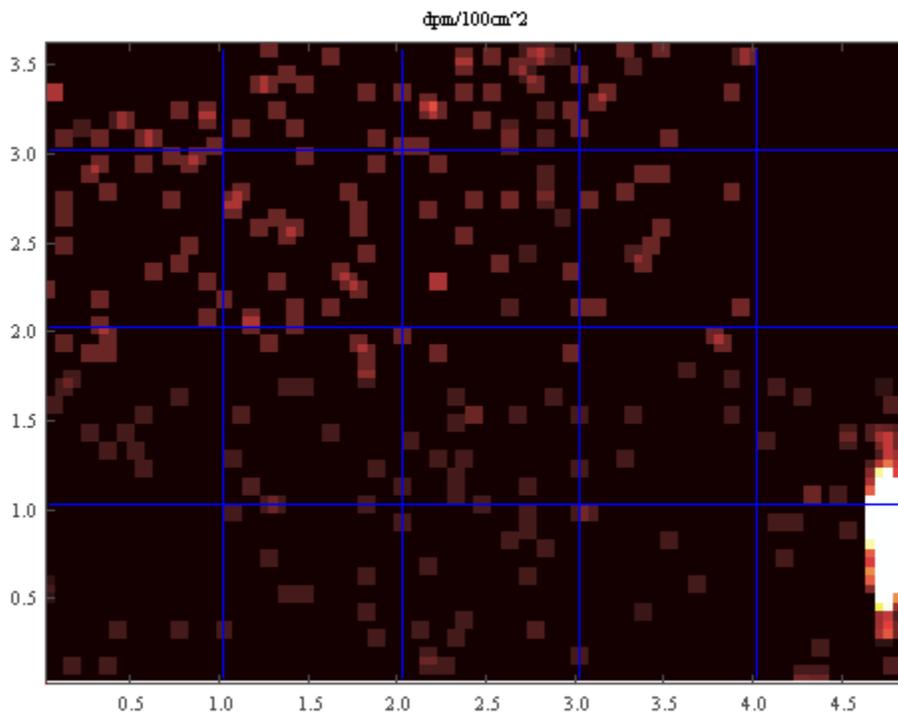


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

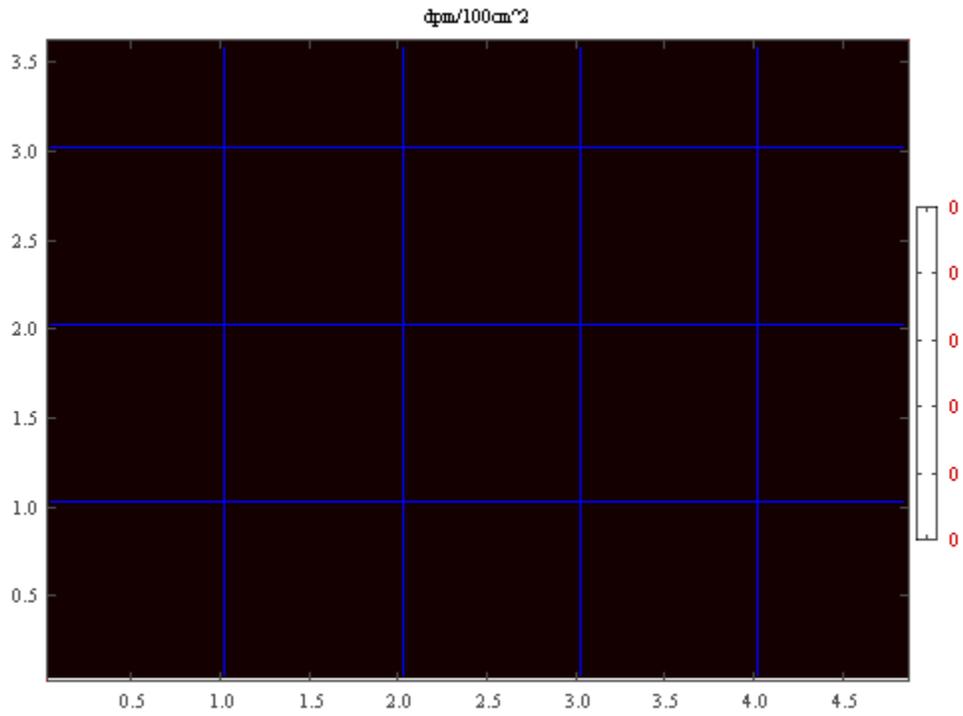


Figure 3: Meter Grid overlaid onto image plot of 100cm^2 areas. The color scale is in dpm per 100cm^2 .

Survey Report

Survey File Name:	FA2421A
Survey Date:	March 5, 2011
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	THROWER/KIRBY
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

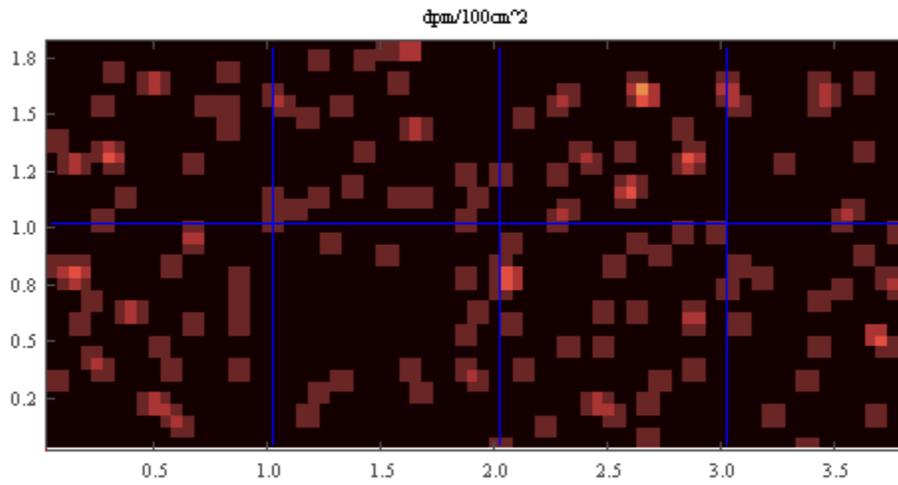


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

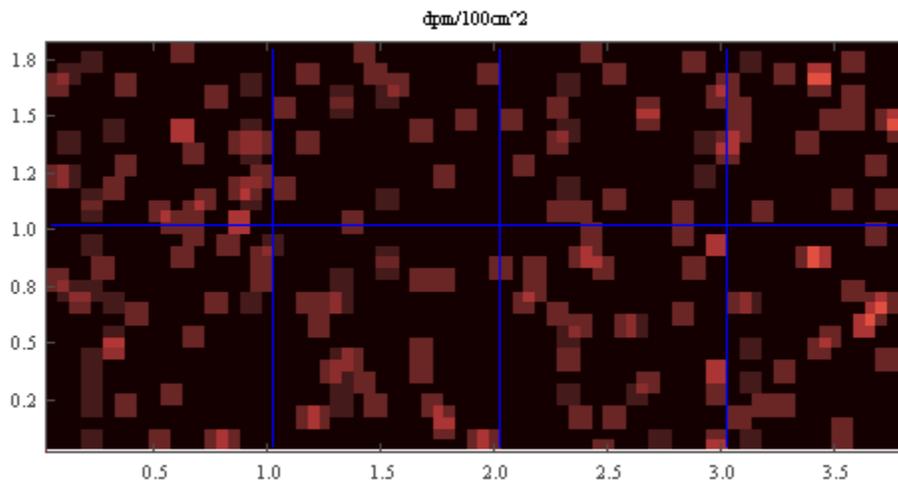


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

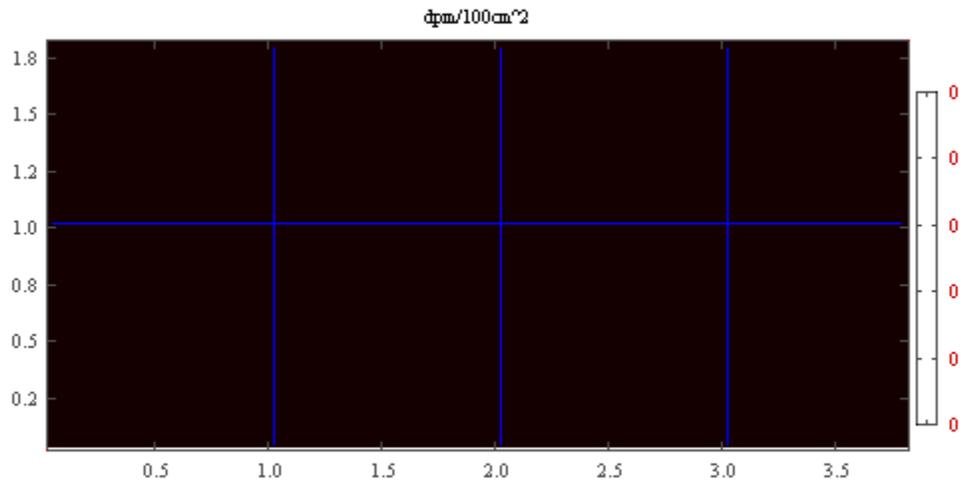


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2421B
Survey Date:	March 8, 2011
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

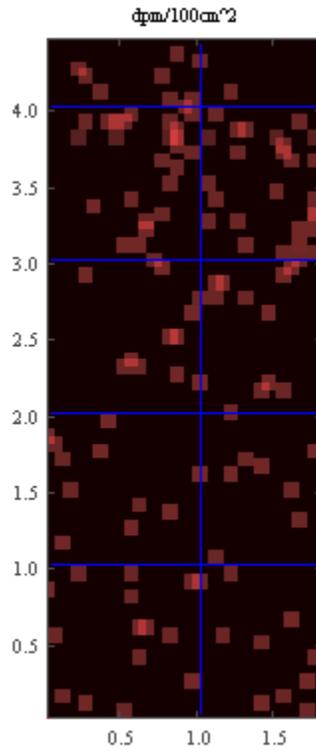


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

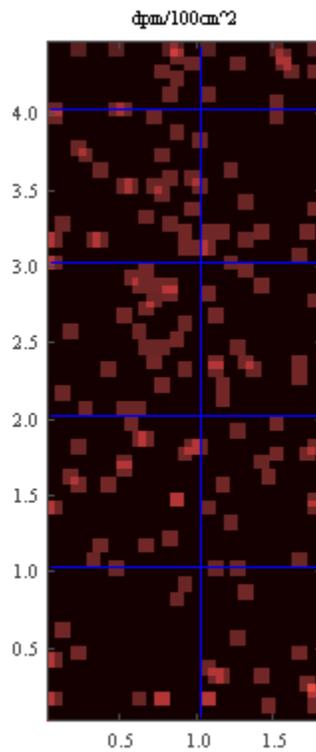


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

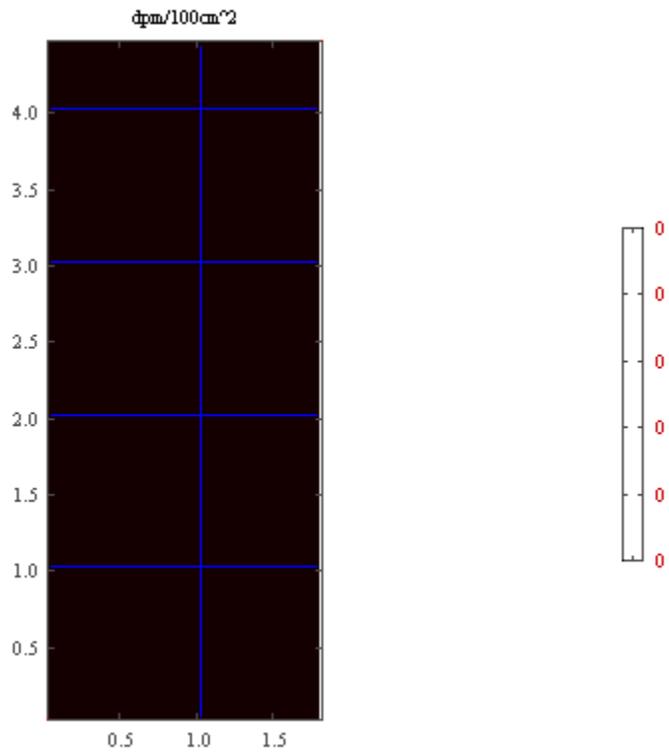


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2431A
Survey Date:	March 5, 2011
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	THROWER/KIRBY
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

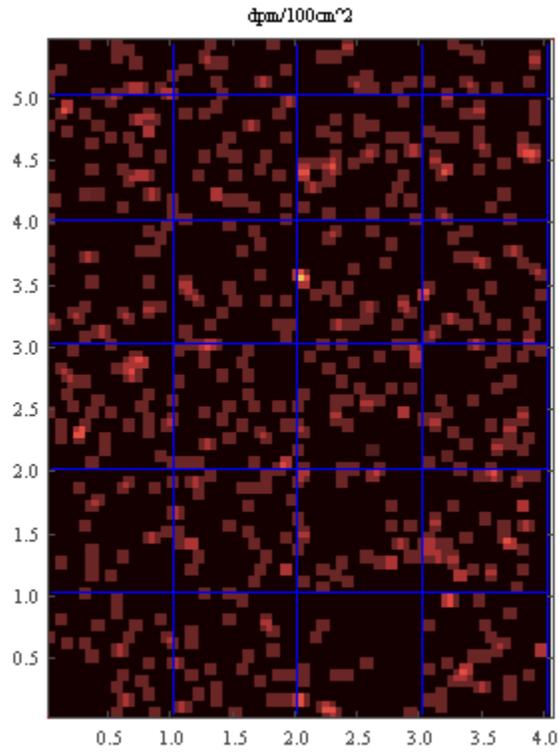


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

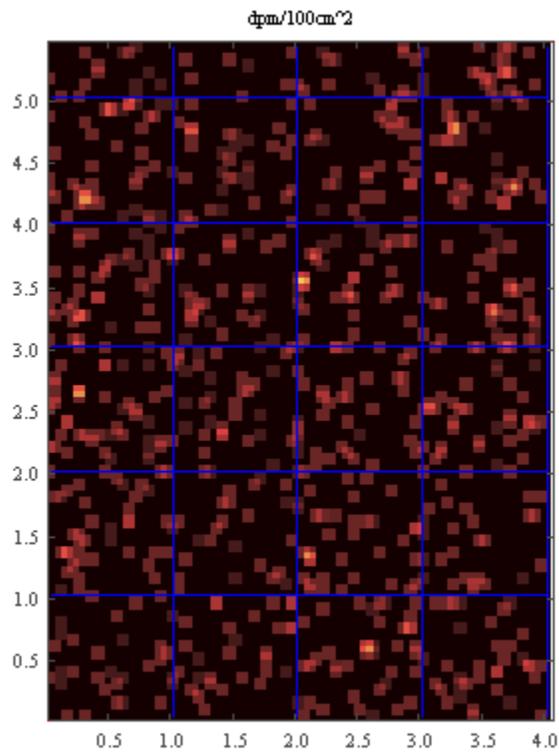


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

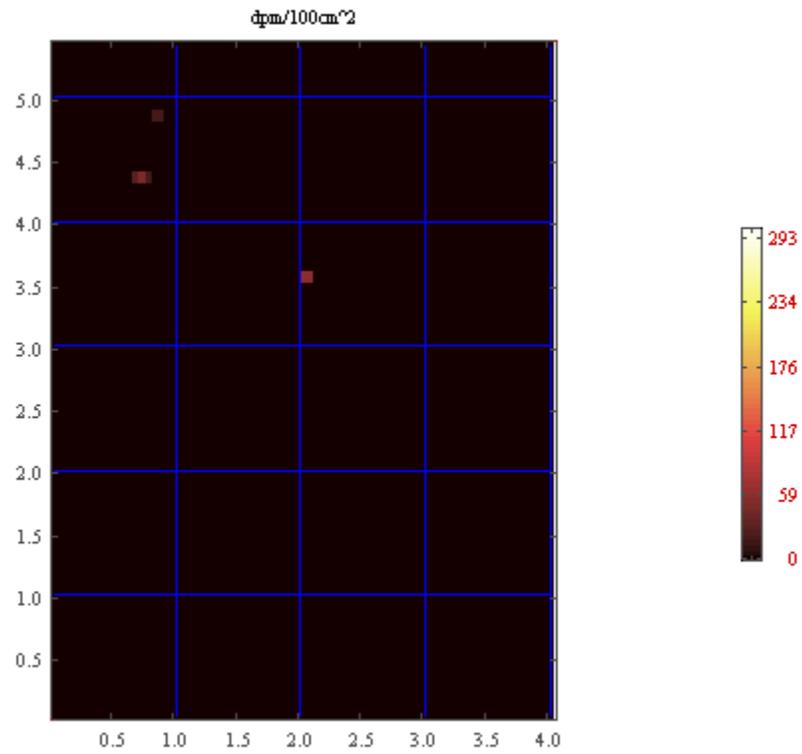


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2501A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	5,421 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.09 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

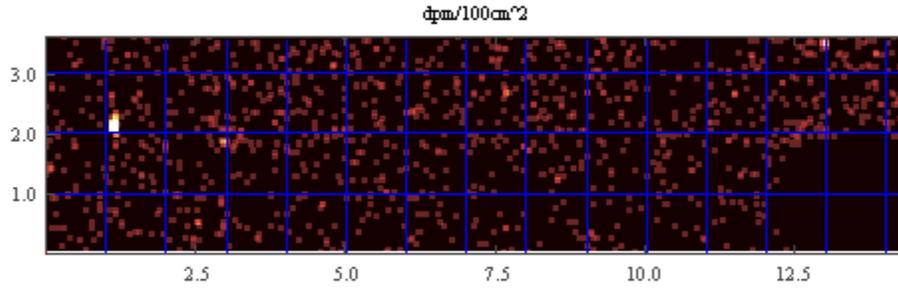


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

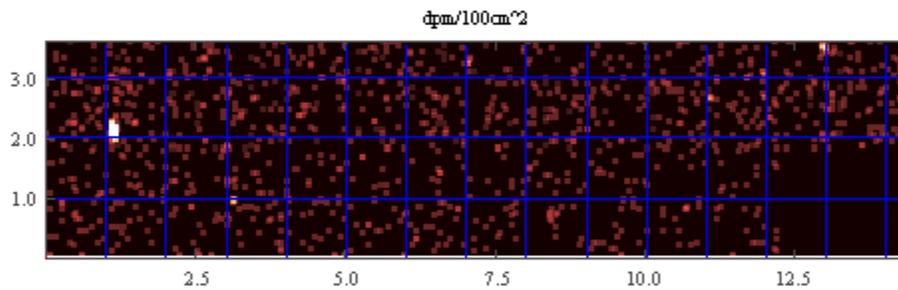


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

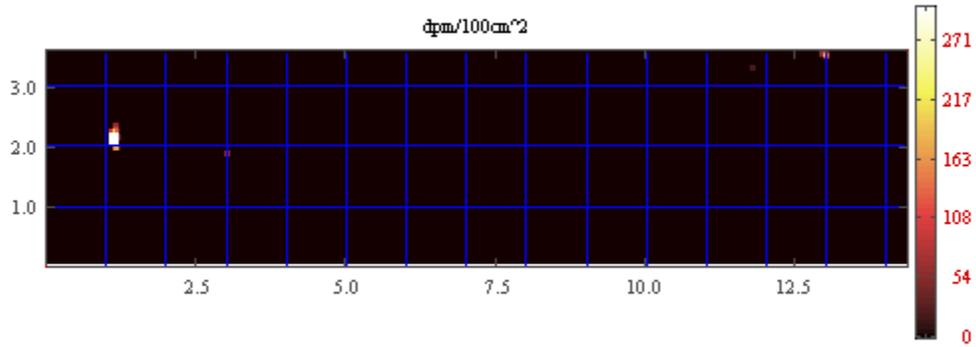


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

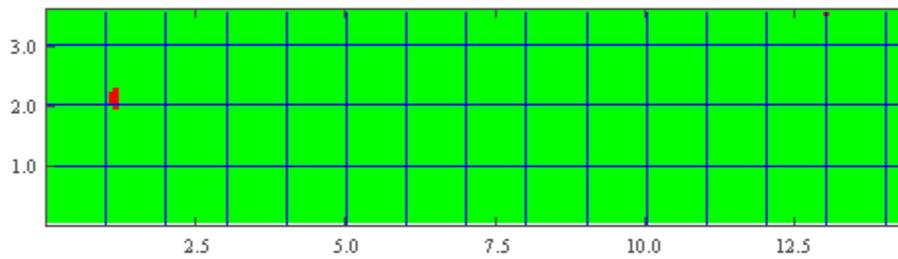


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	5421	31	(115,210)	(0,25)	N/A		
Spot	211	31	(115,225)	(0,40)	N/A		
Spot	195	267	(1295,350)	(0,165)	N/A		
Spot	176	31	(120,195)	(5,10)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2511A
Survey Date:	November 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

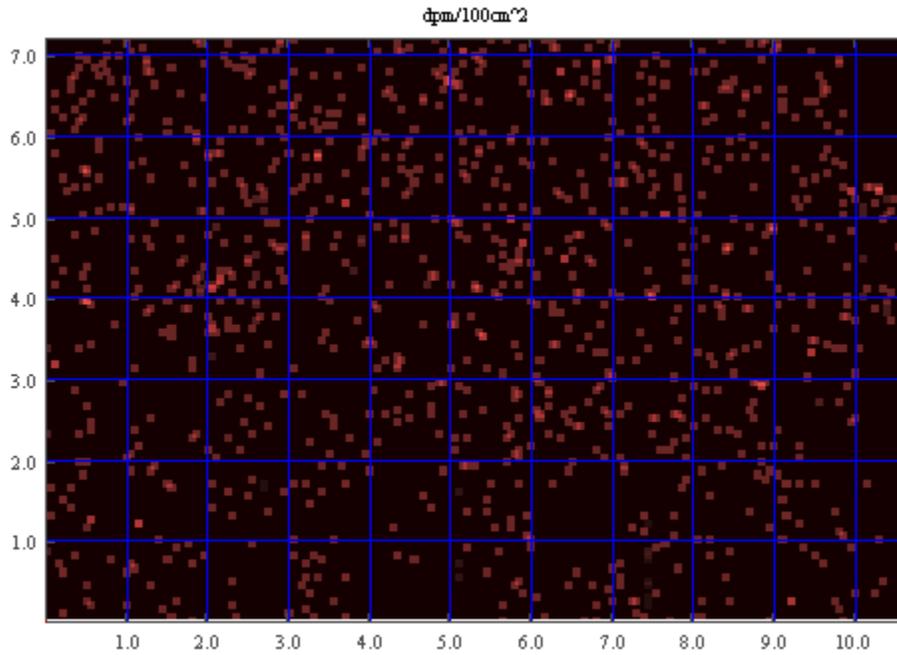


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

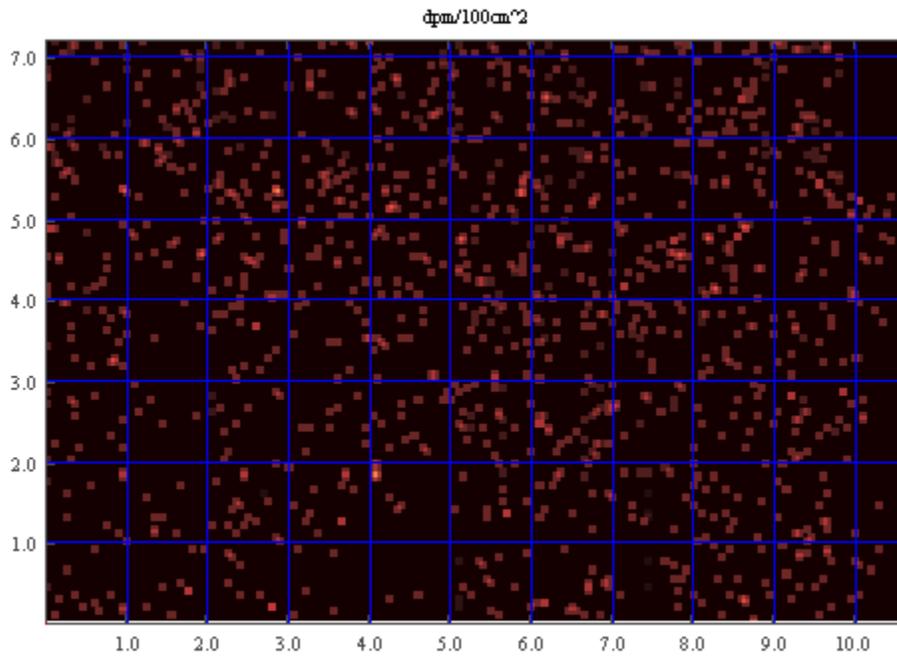


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

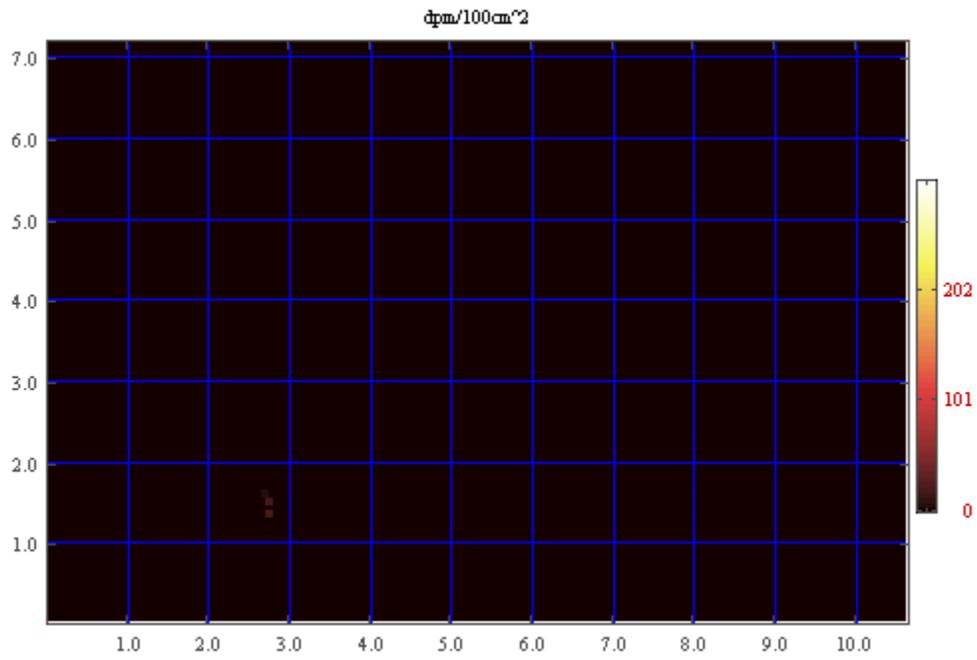


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2521A
Survey Date:	November 29, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

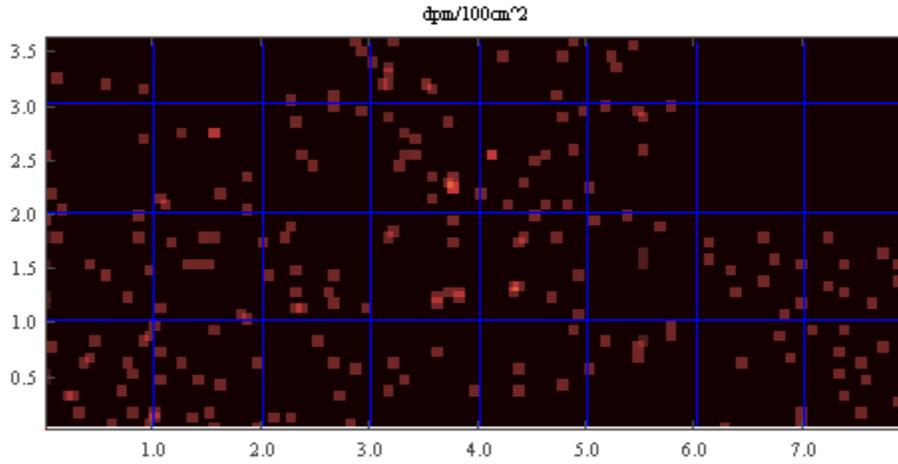


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

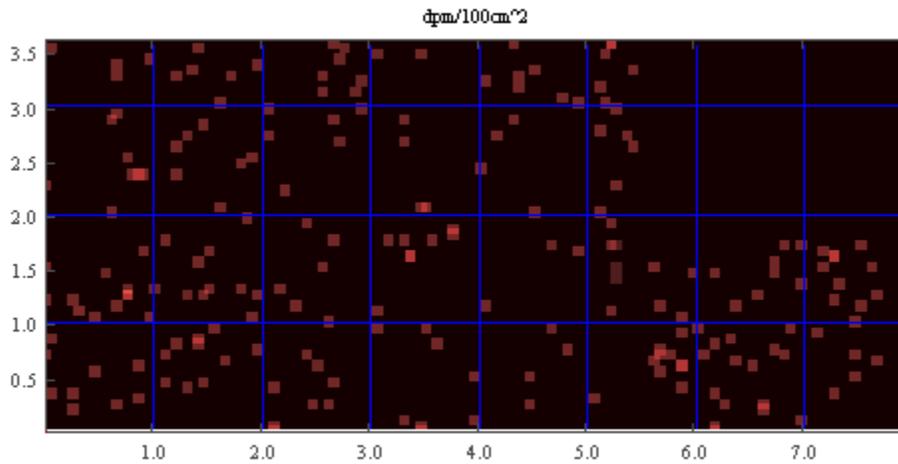


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

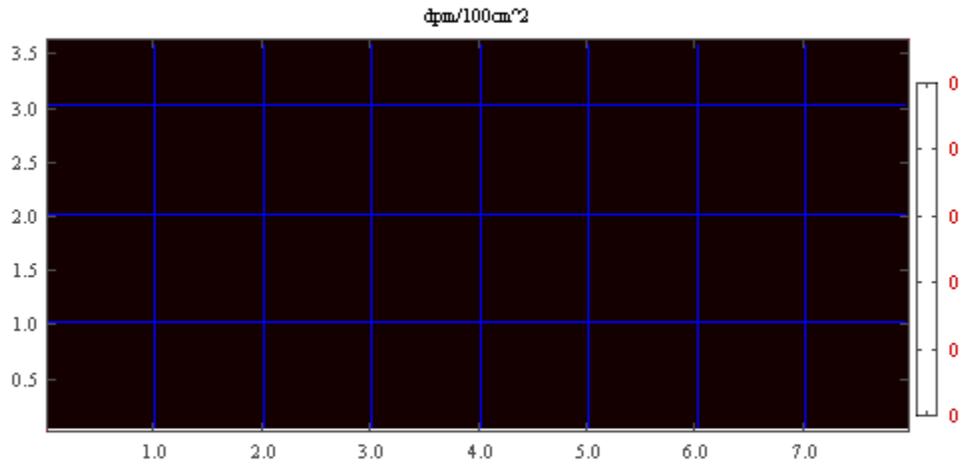


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2521B
Survey Date:	March 5, 2011
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	THROWER/KIRBY
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

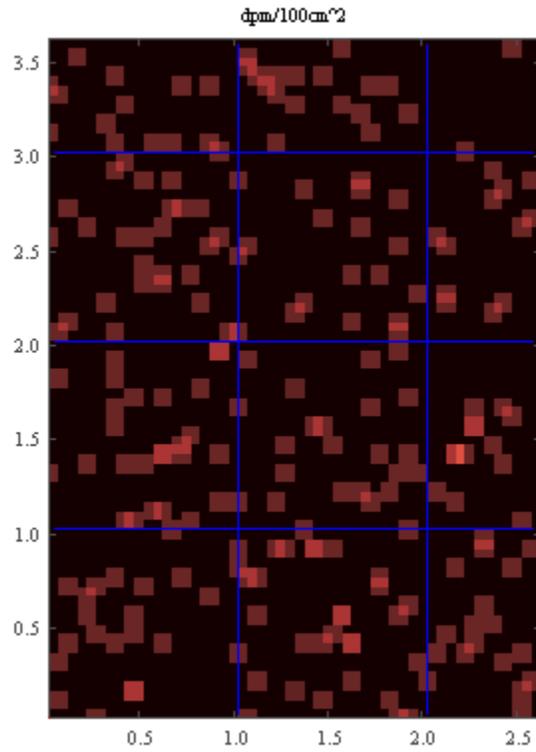


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

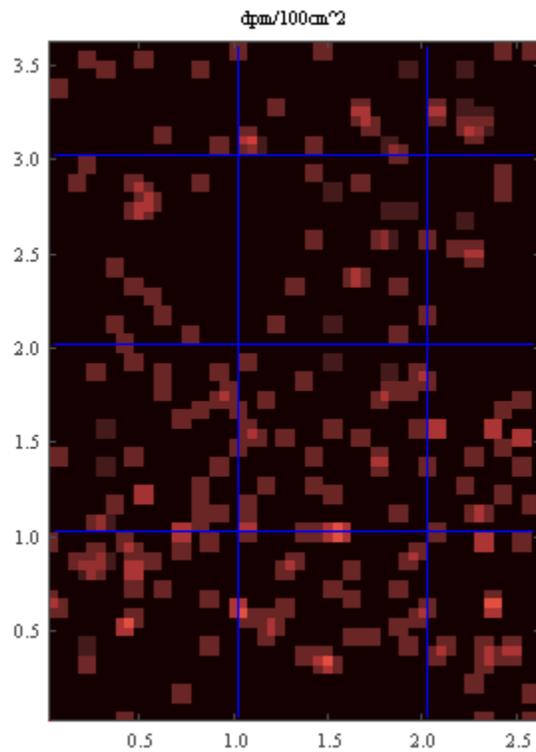


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

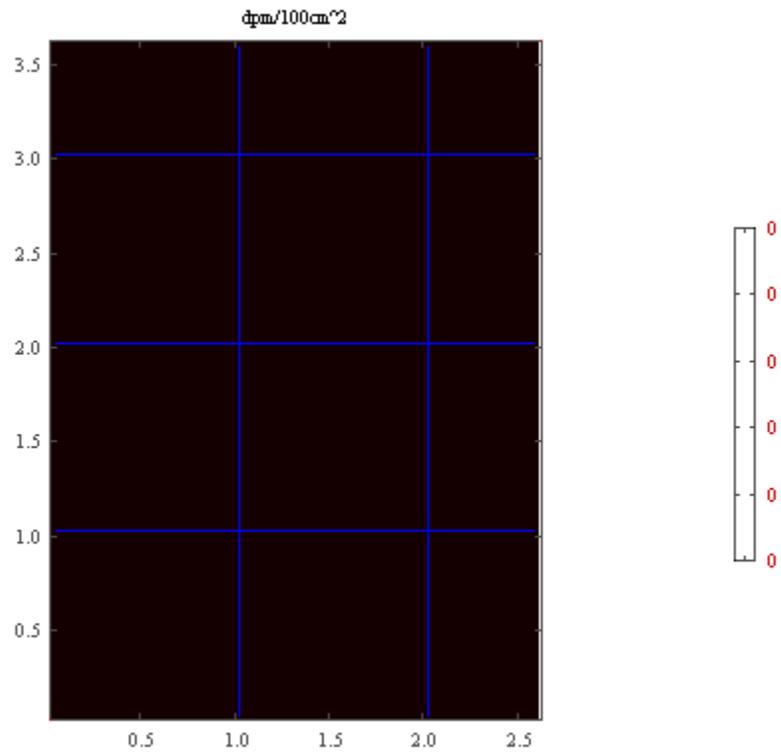


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2531A
Survey Date:	March 5, 2011
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	THROWER/KIRBY
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

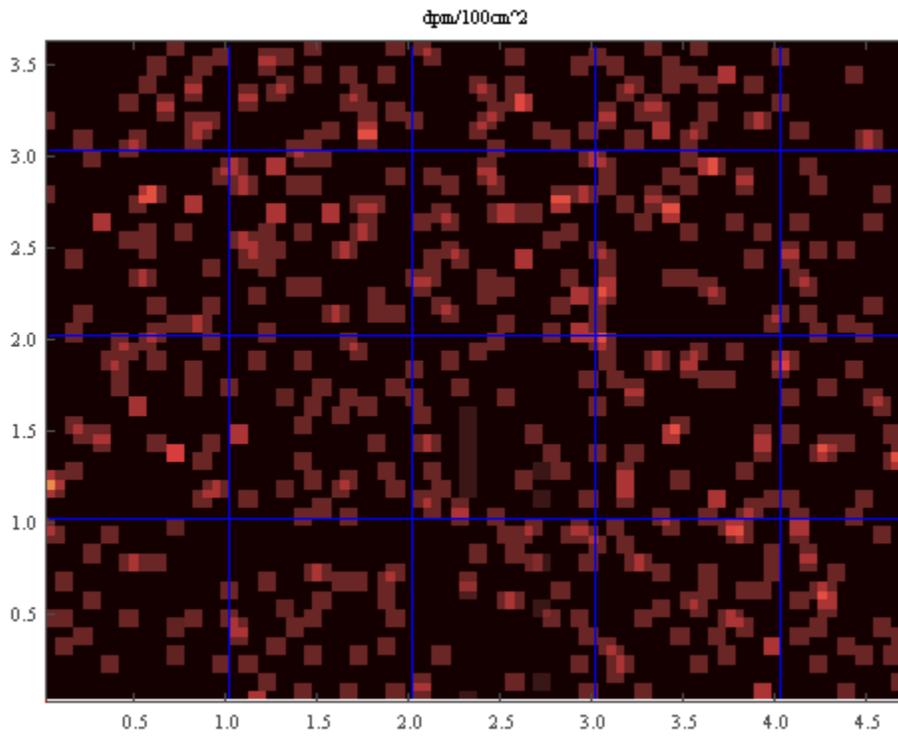


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

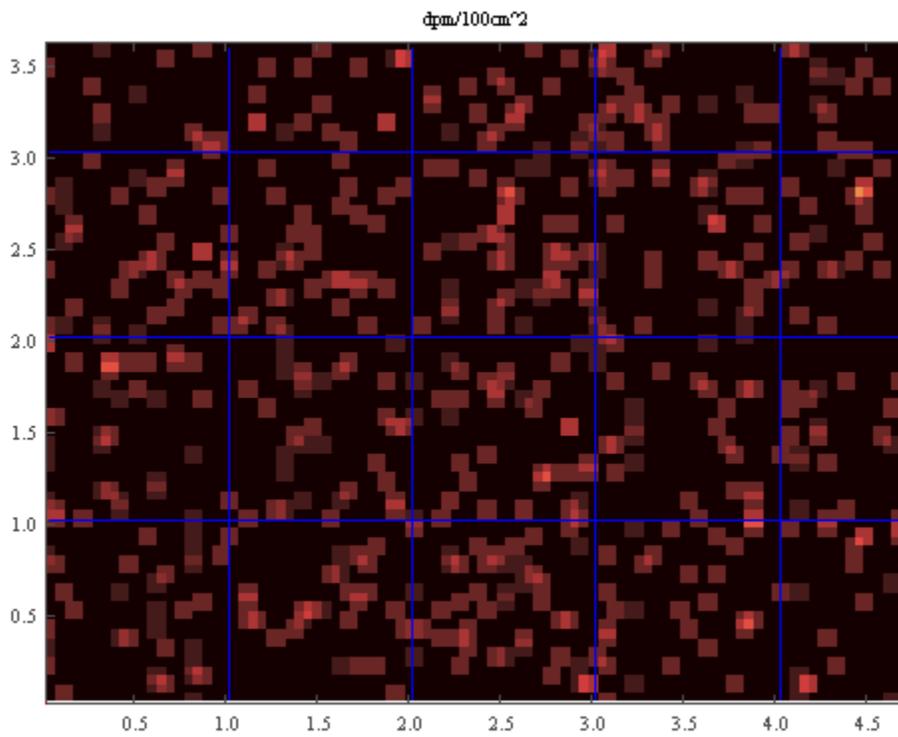


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

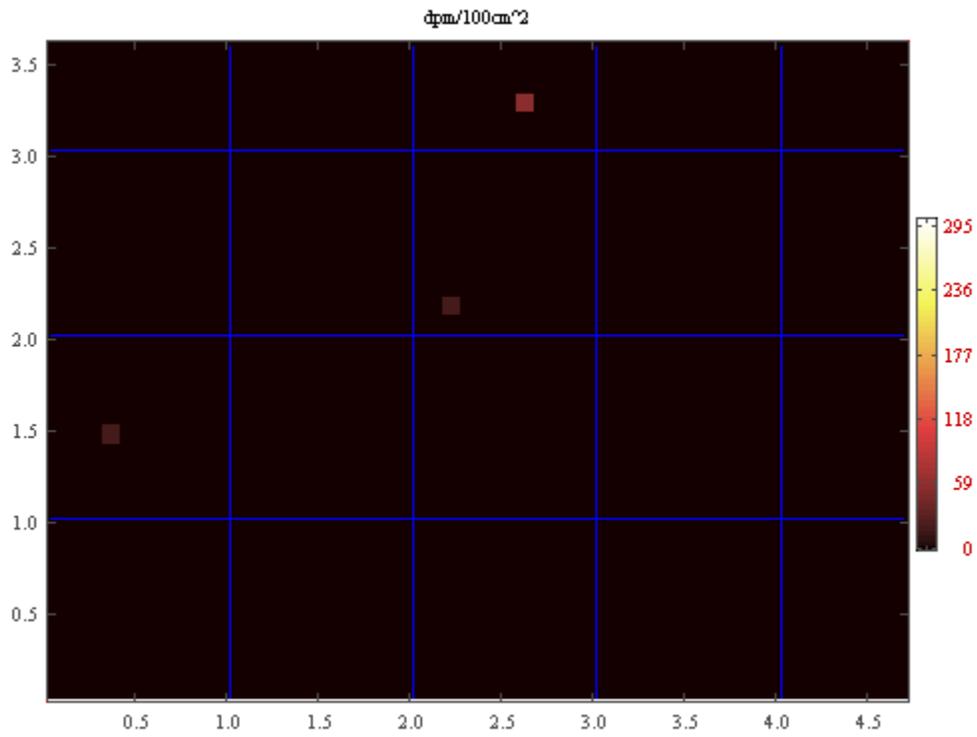


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2601A
Survey Date:	January 18, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

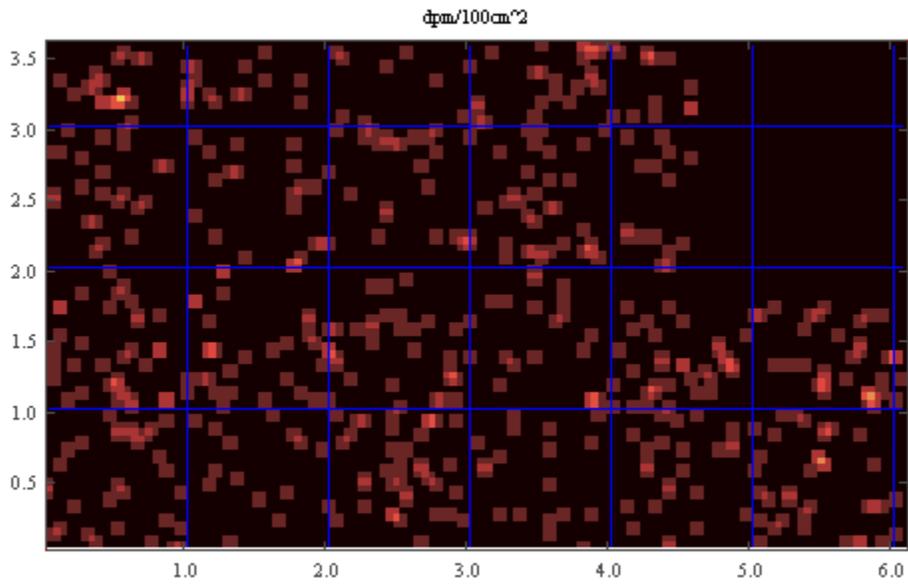


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

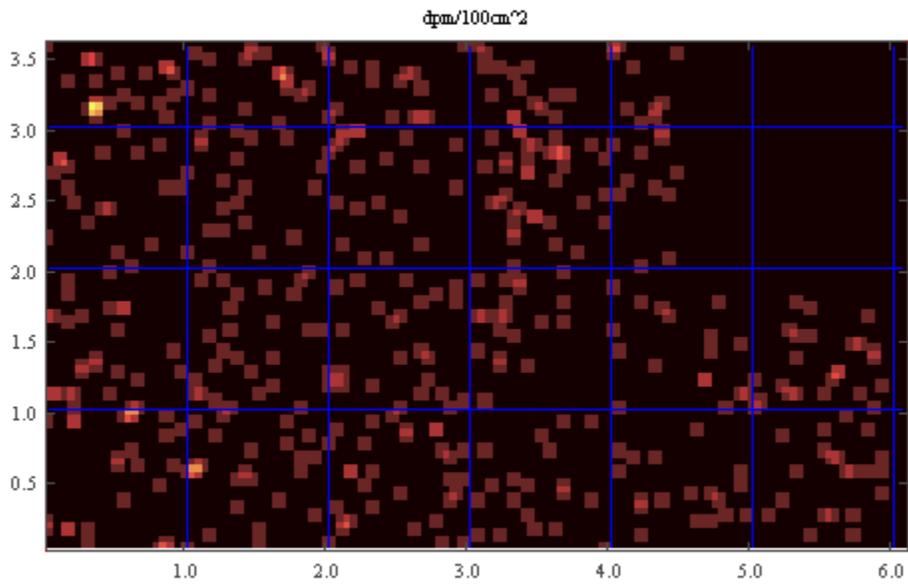


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

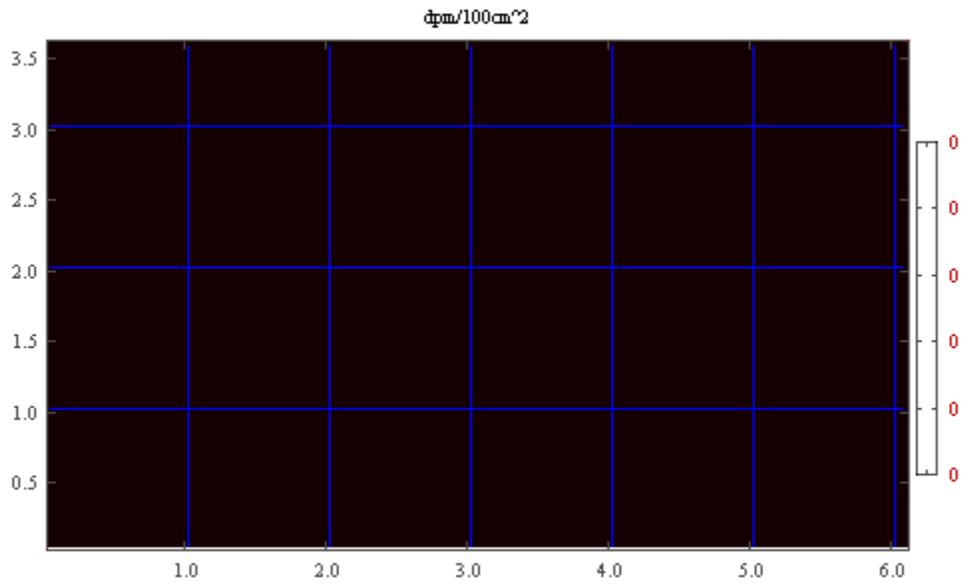


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2601B
Survey Date:	February 15, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

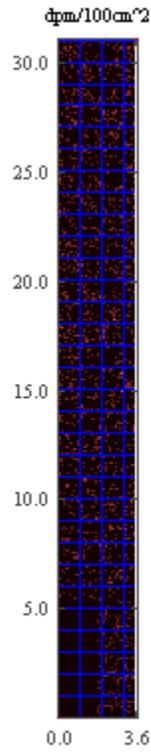


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

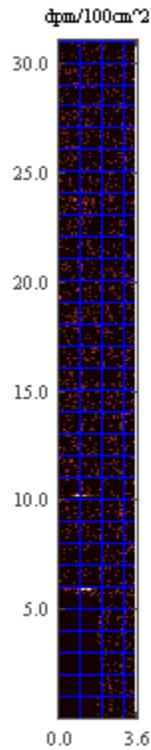


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

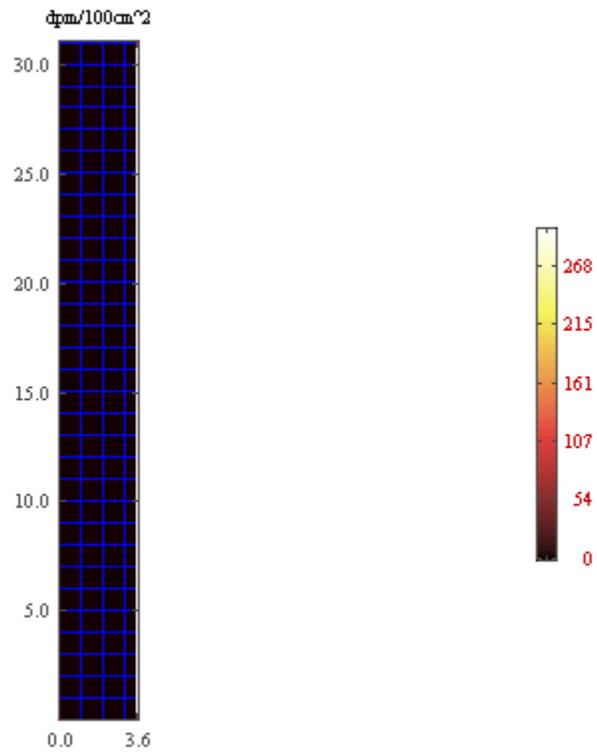


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2611A
Survey Date:	January 21, 2011
Survey Equipment:	SCM8
Detector(s):	C90 C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

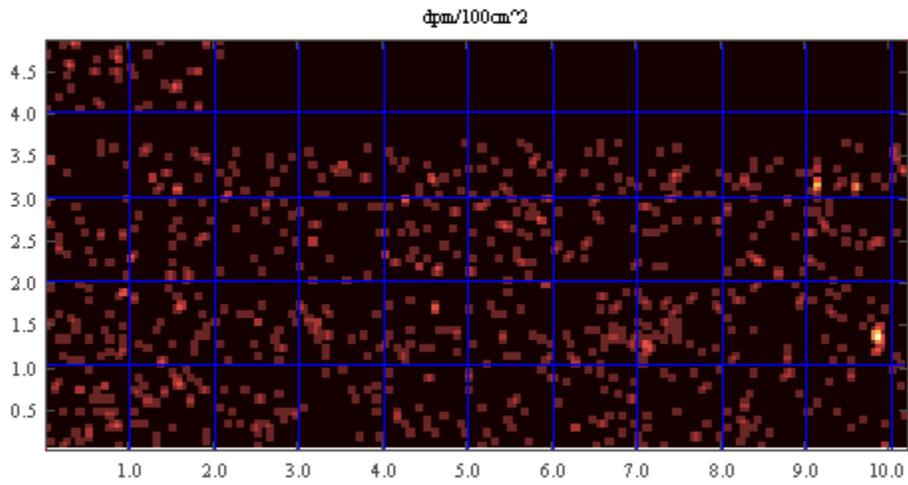


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

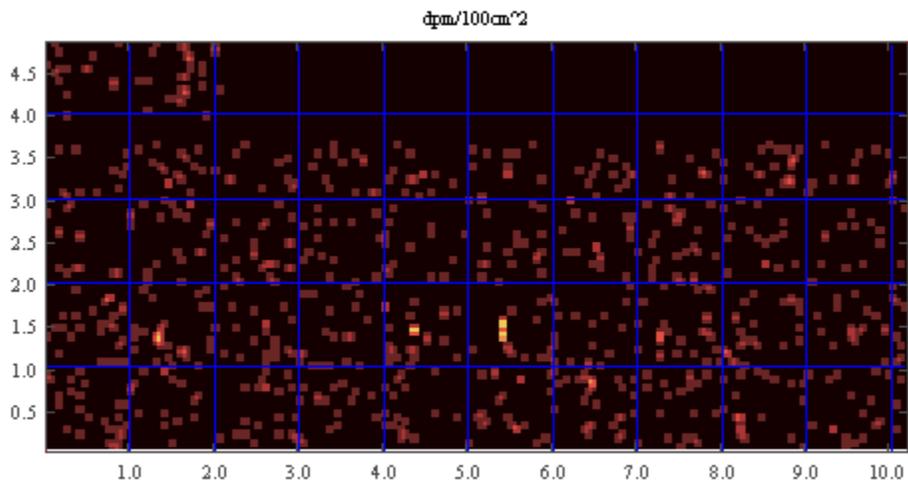


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

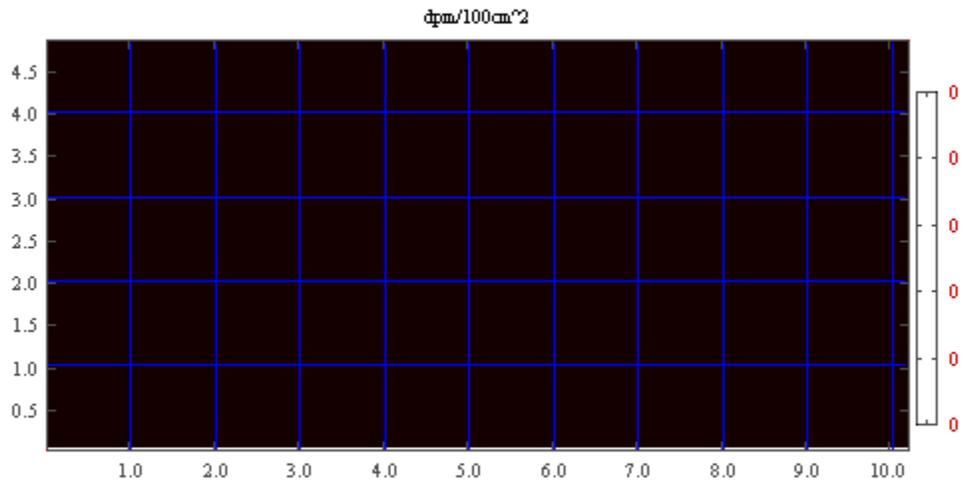


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2611B
Survey Date:	February 15, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

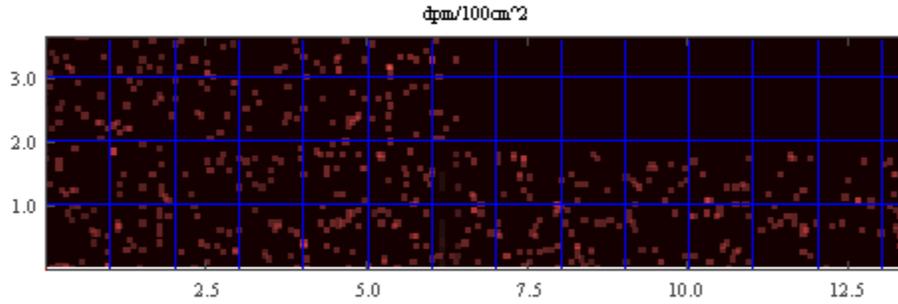


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

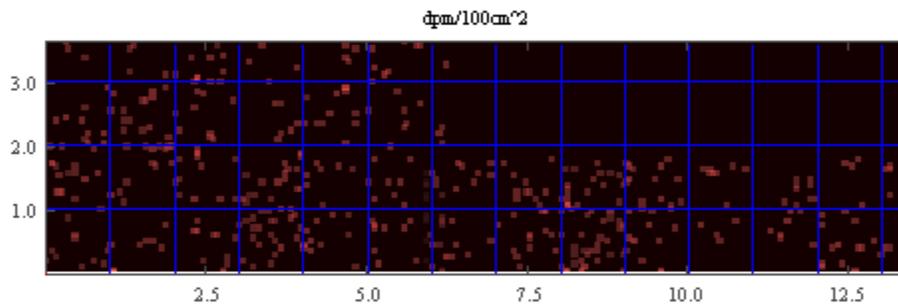


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

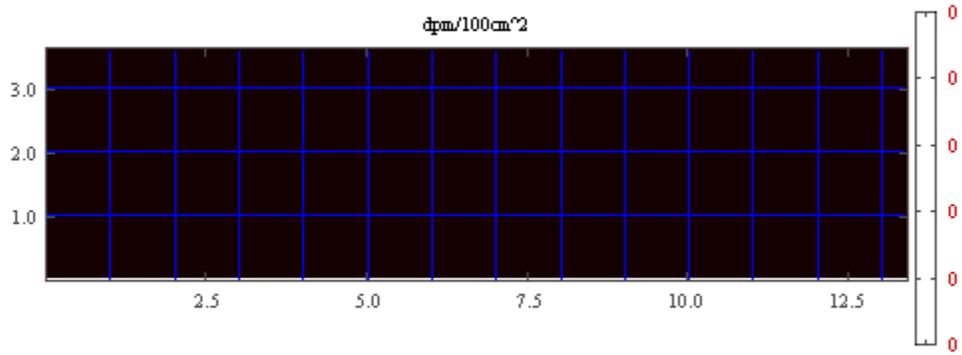


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2611C
Survey Date:	February 24, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

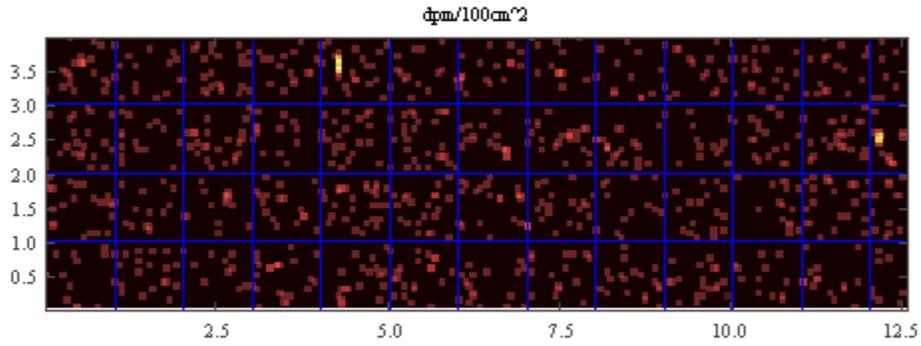


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

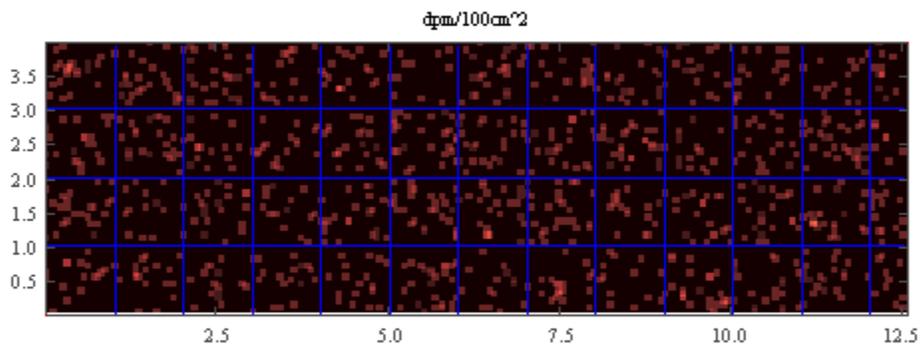


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

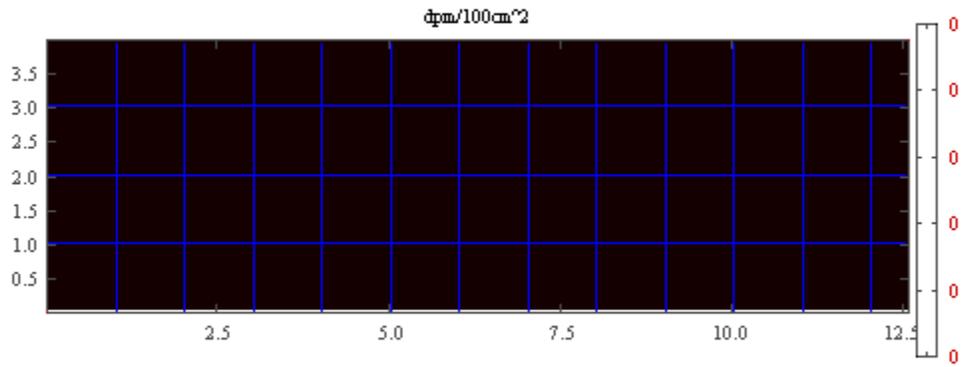


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2611D
Survey Date:	February 24, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

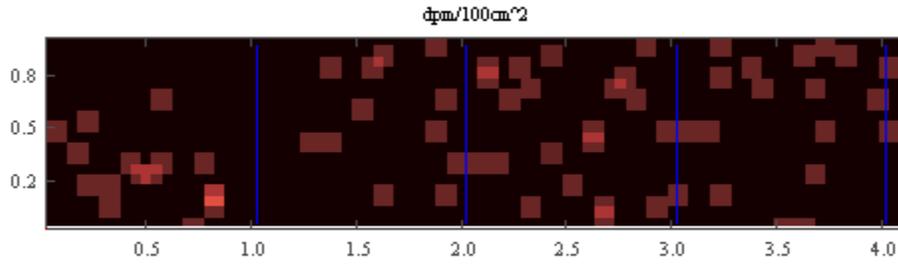


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

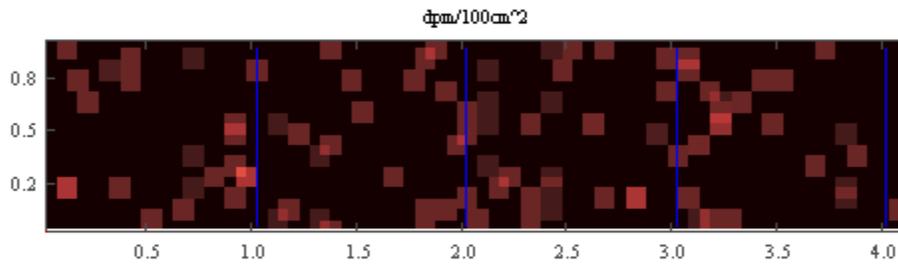


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

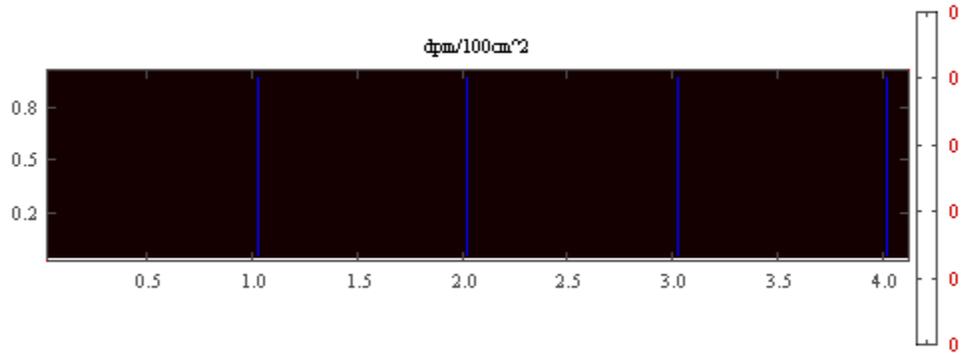


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2621A
Survey Date:	January 18, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	385 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.15 m ²

This survey is not position correlated.

Primary Detector:

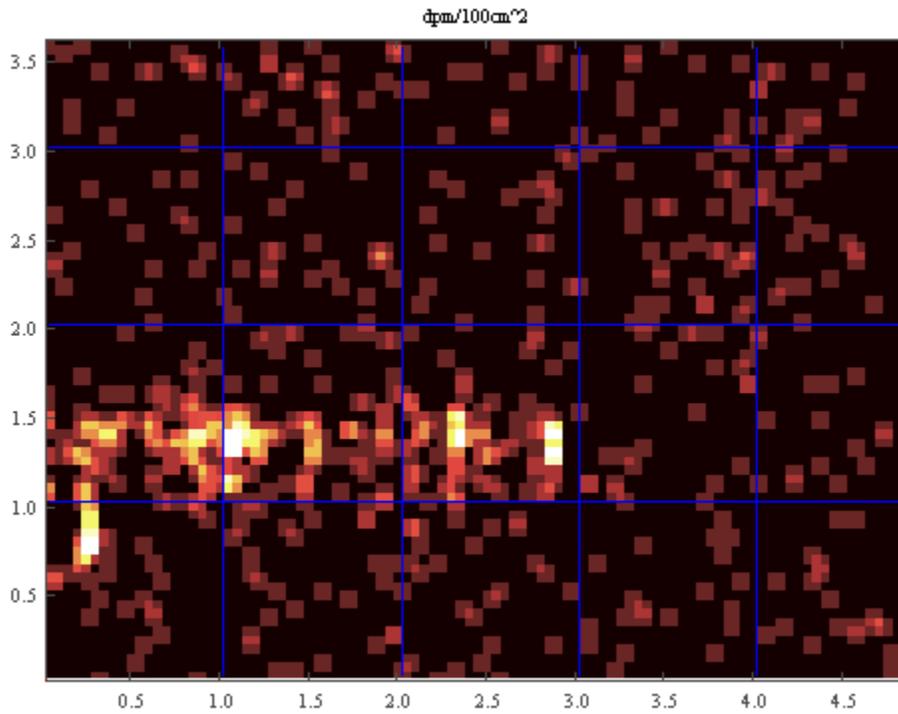


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

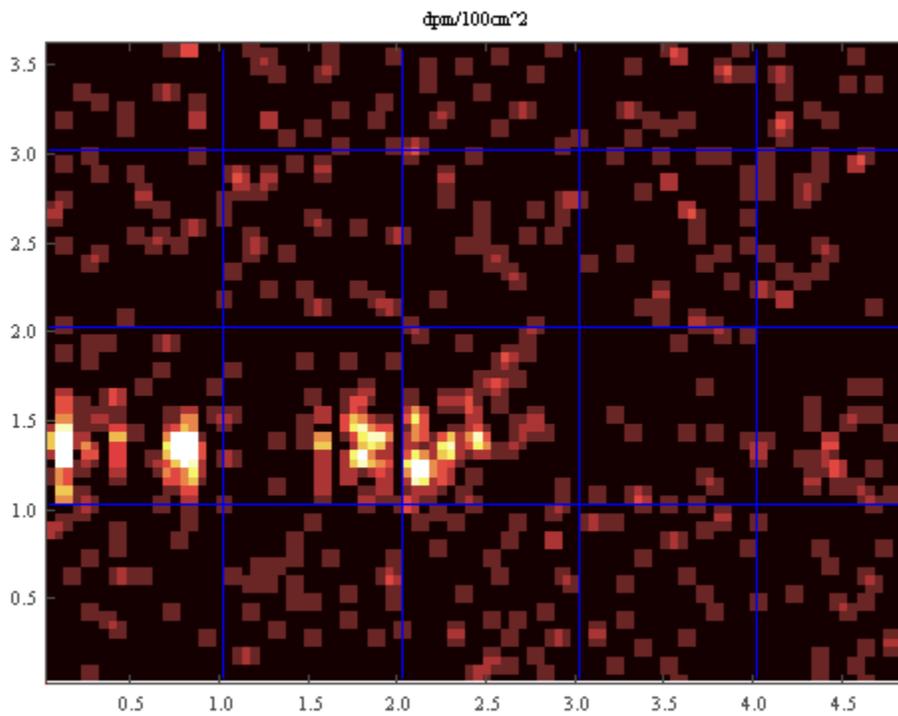


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

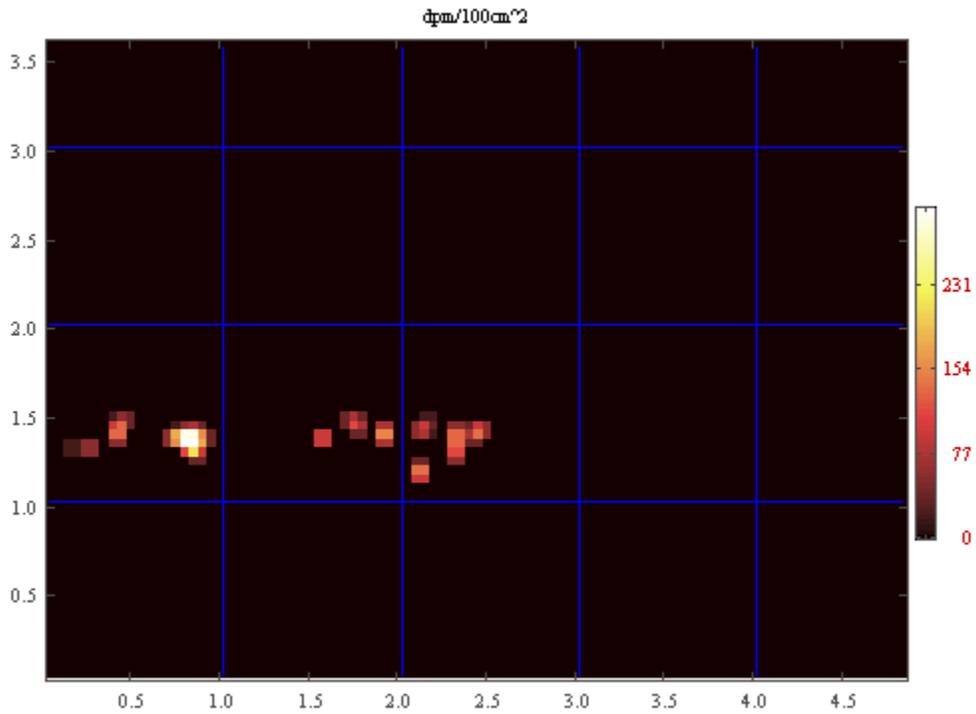


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

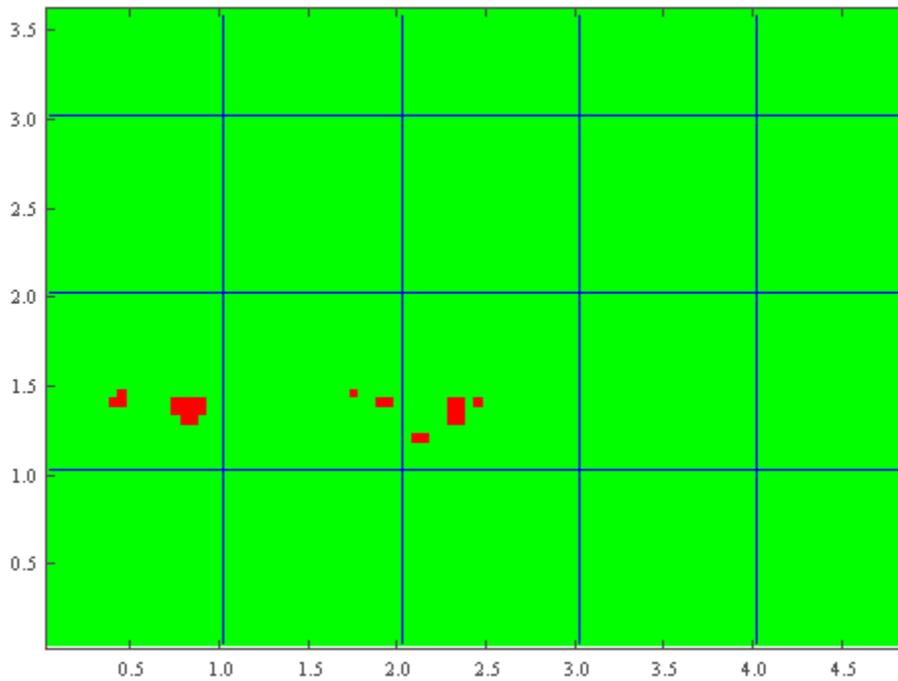


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	385	18	(85,135)	(0,130)	N/A		
Spot	154	38	(190,140)	(5,135)	N/A		
Spot	137	42	(210,120)	(5,115)	N/A		
Spot	137	50	(245,140)	(0,135)	N/A		
Spot	134	46	(230,135)	(5,130)	N/A		
Spot	133	10	(45,145)	(0,140)	N/A		
Spot	116	36	(175,145)	(0,140)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2621B
Survey Date:	February 28, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	305 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.03 m ²

This survey is not position correlated.

Primary Detector:

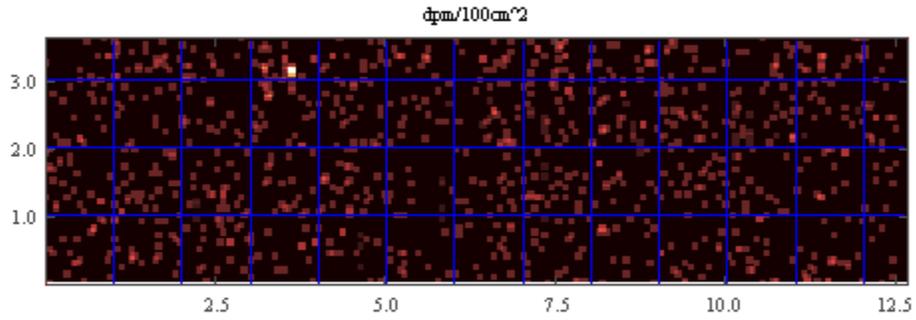


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

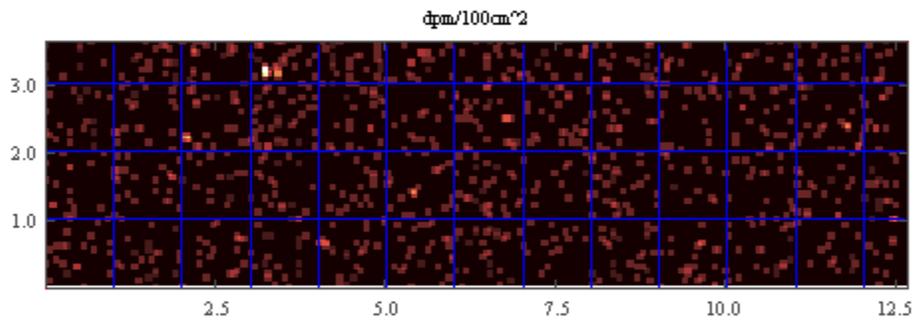


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

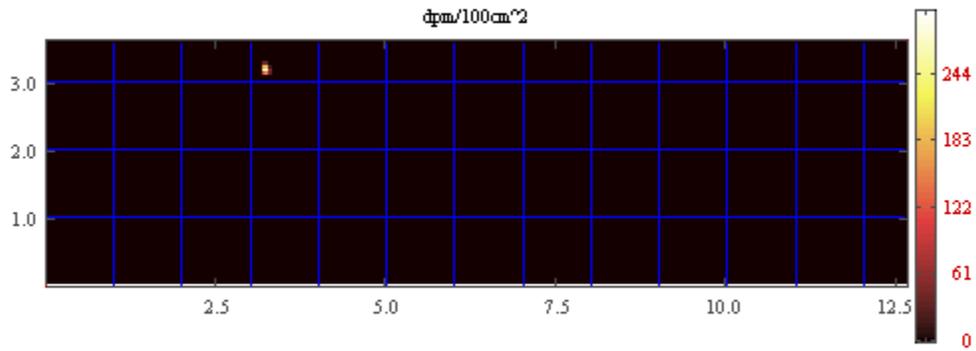


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

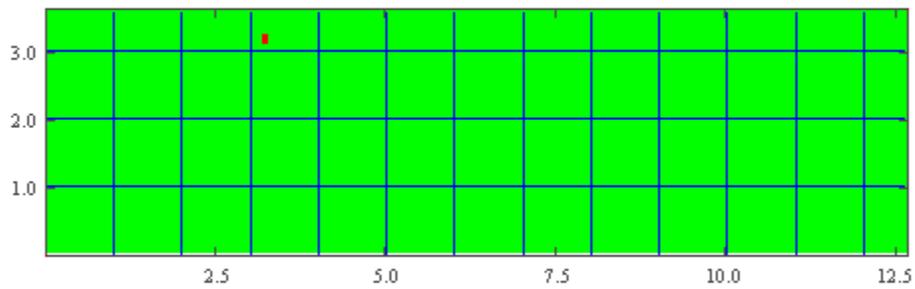


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	305	816	(325,315)	(0,40)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA2621C
Survey Date:	February 28, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

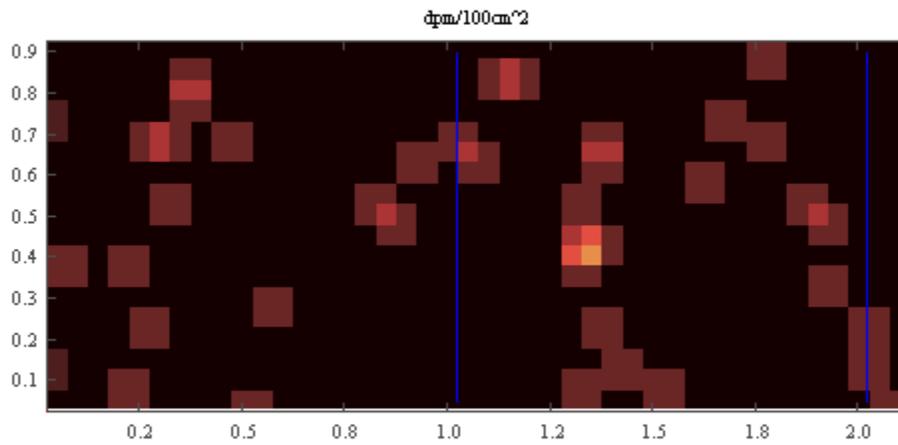


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

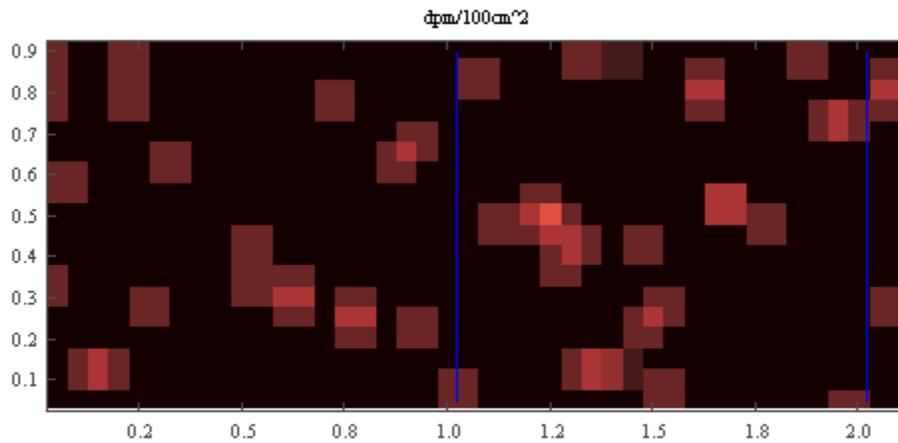


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

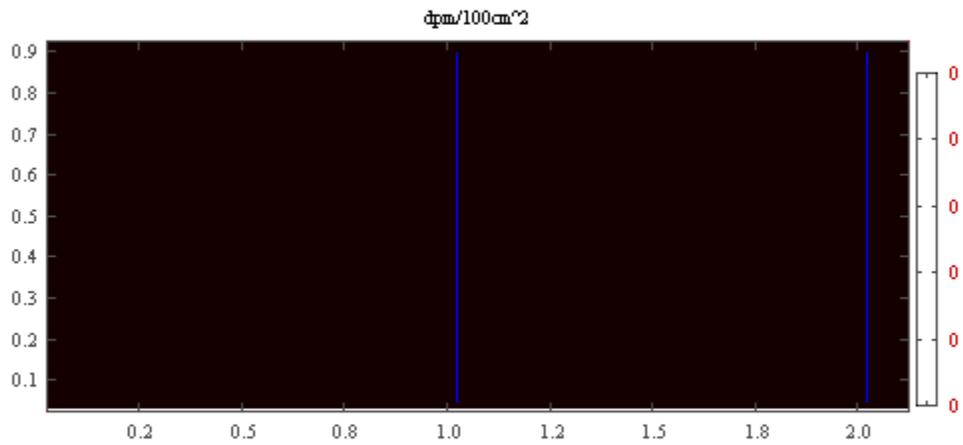


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2631A
Survey Date:	March 3, 2011
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

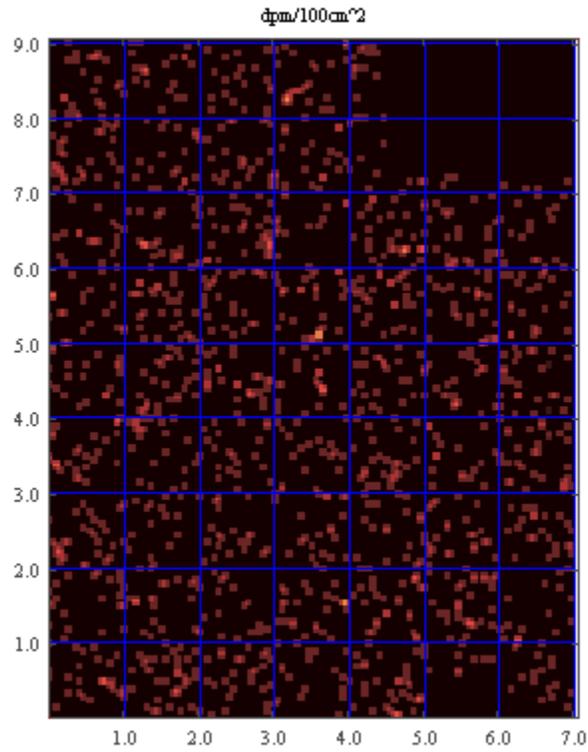


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

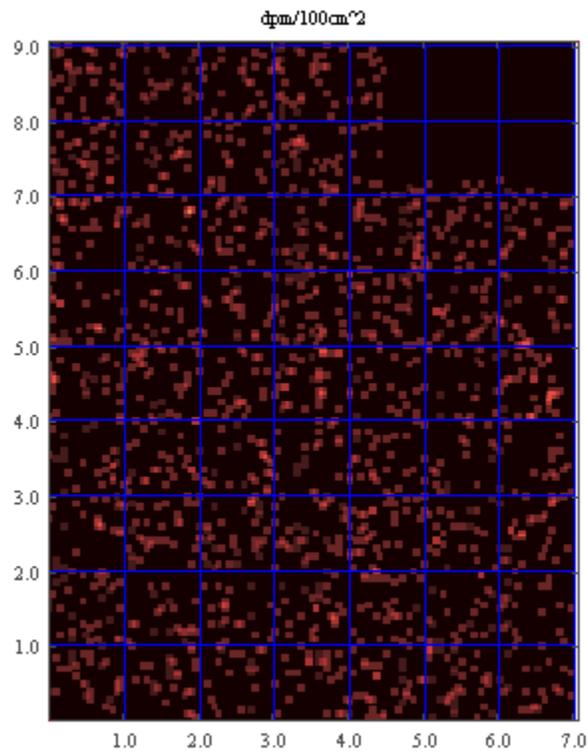


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

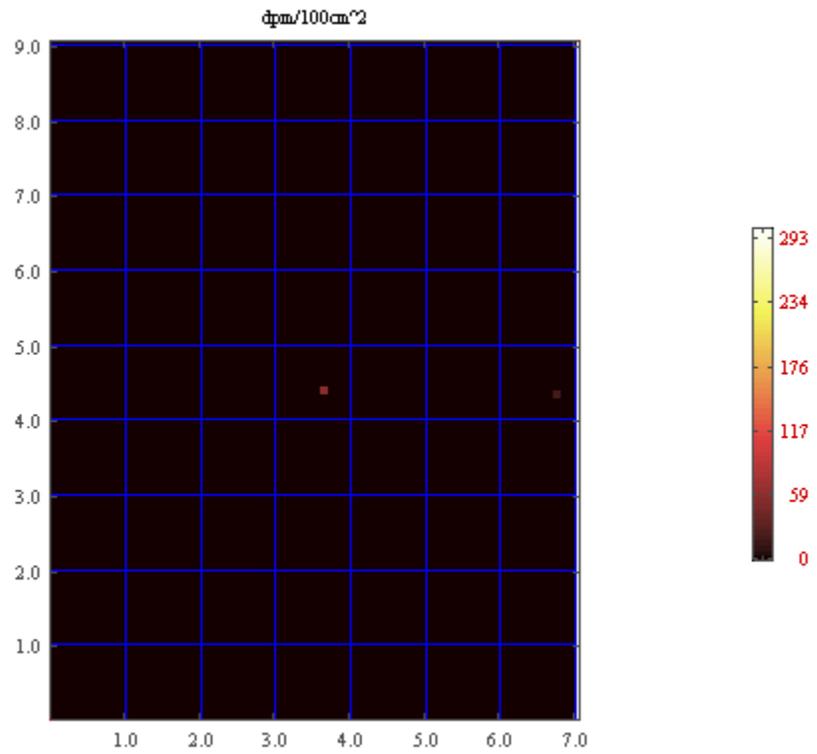


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2701A
Survey Date:	February 14, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

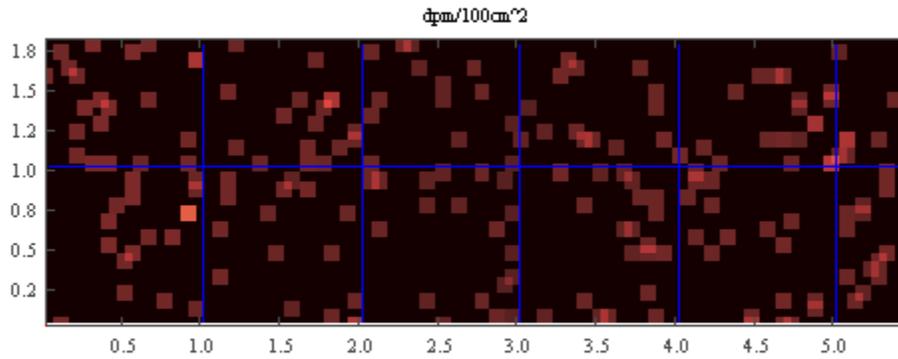


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

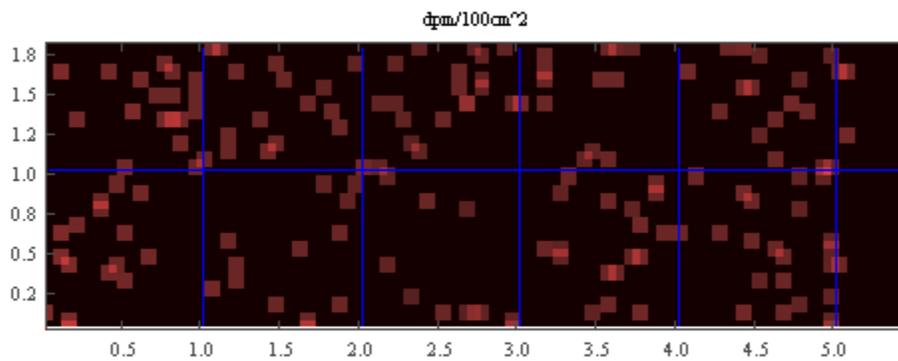


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

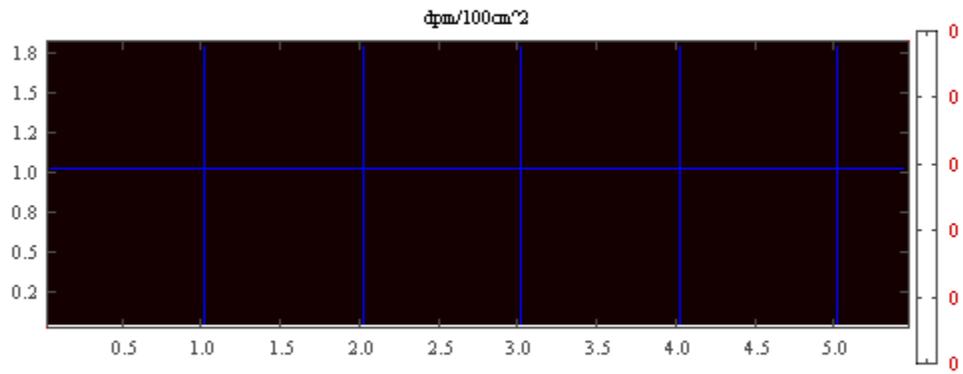


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2711A
Survey Date:	March 1, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

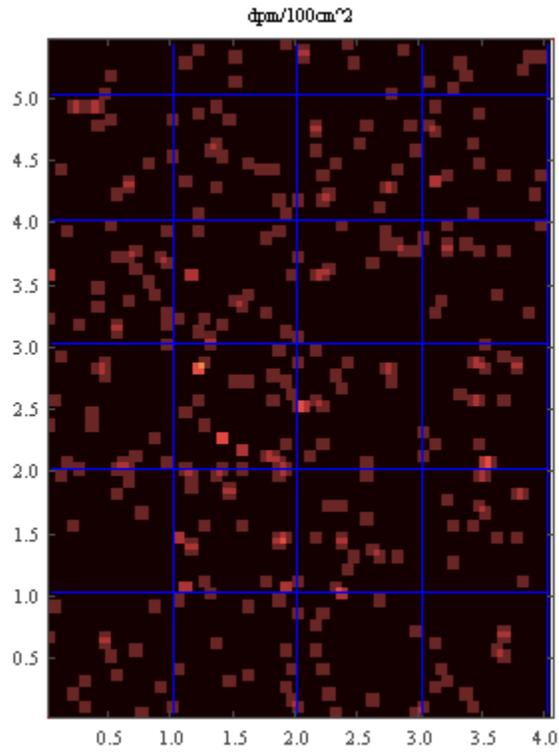


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

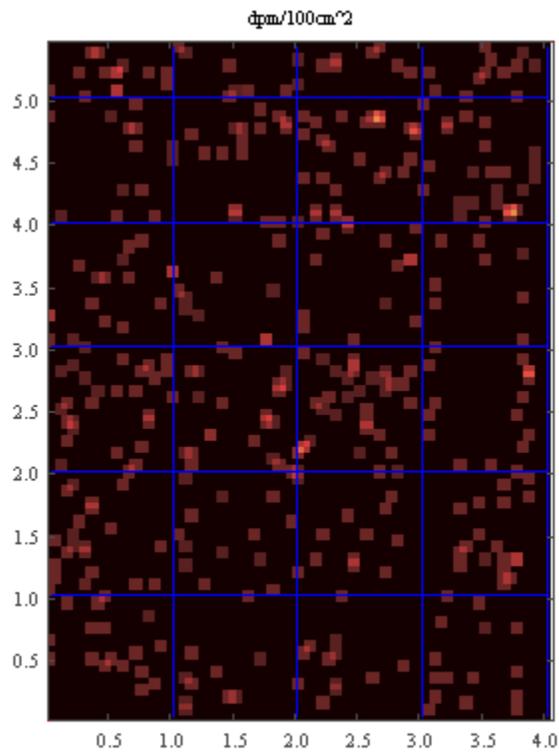


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

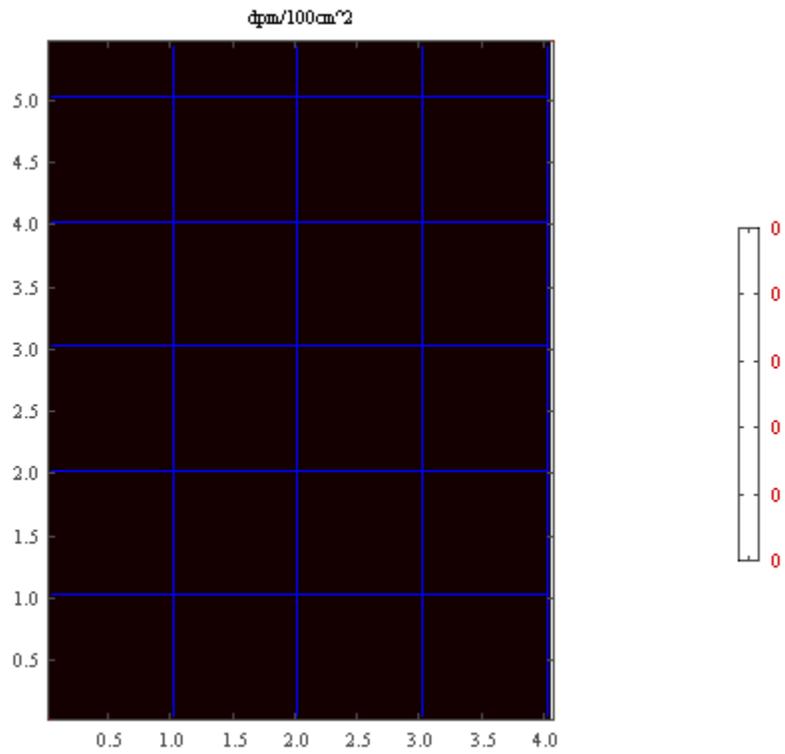


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2801A
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/VASSETT
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

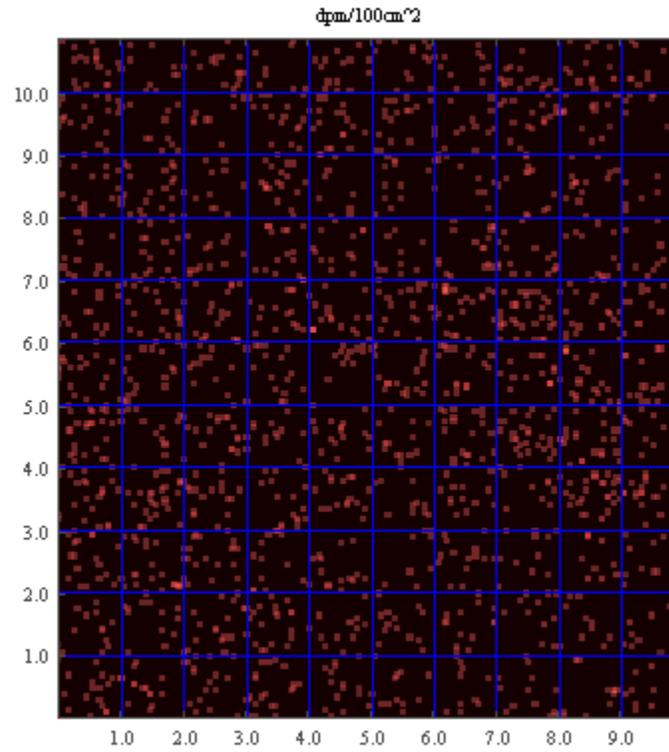


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

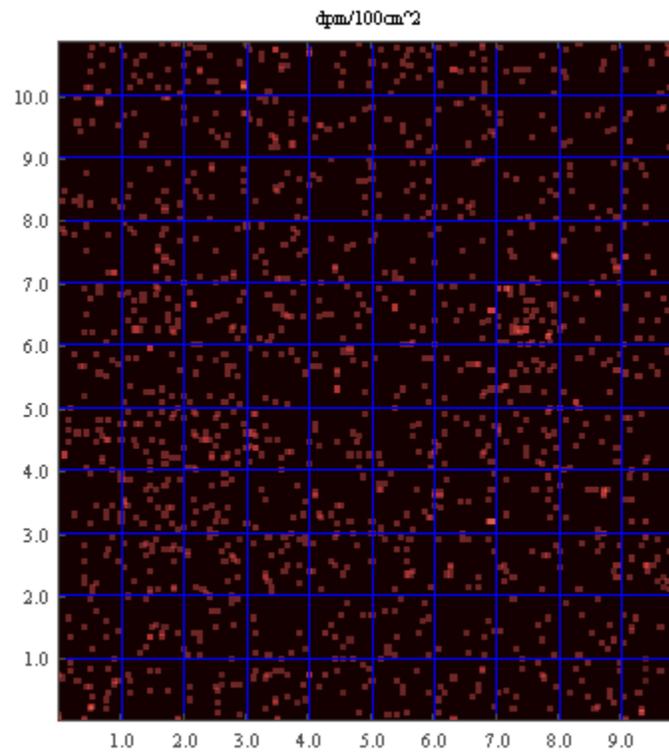


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

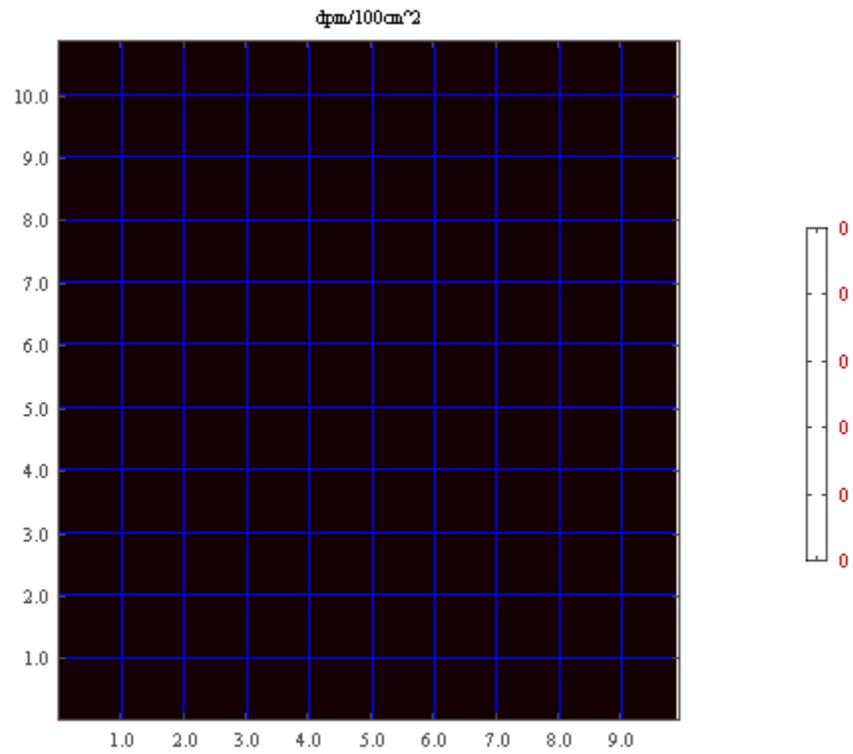


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2801B
Survey Date:	December 15, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

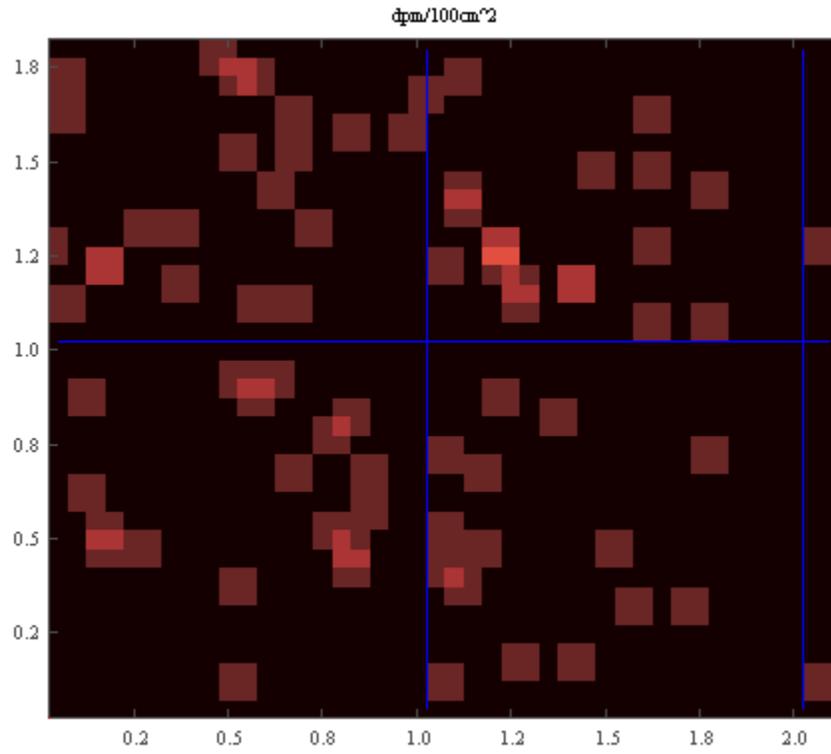


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

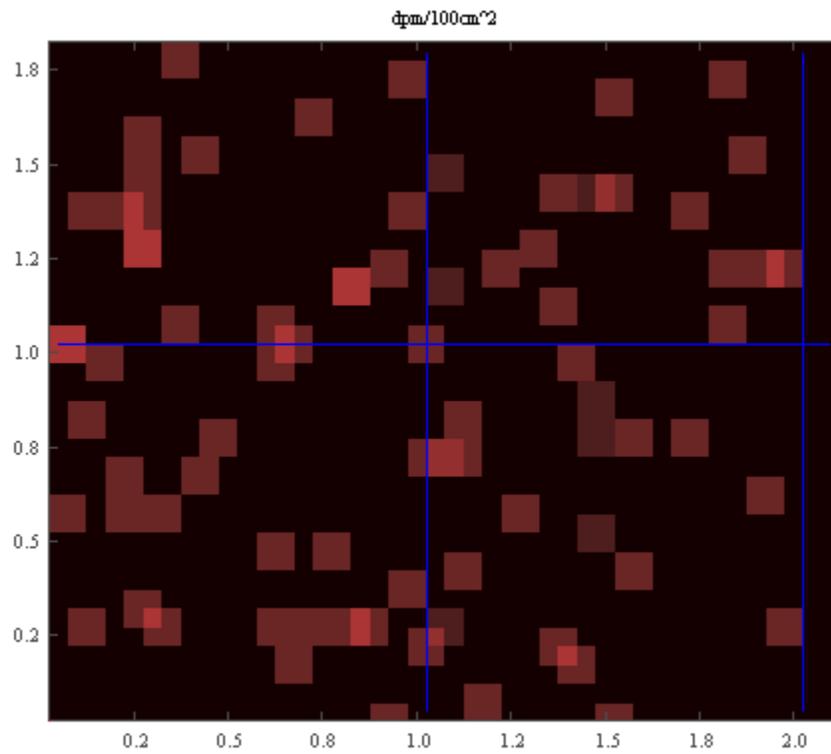


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

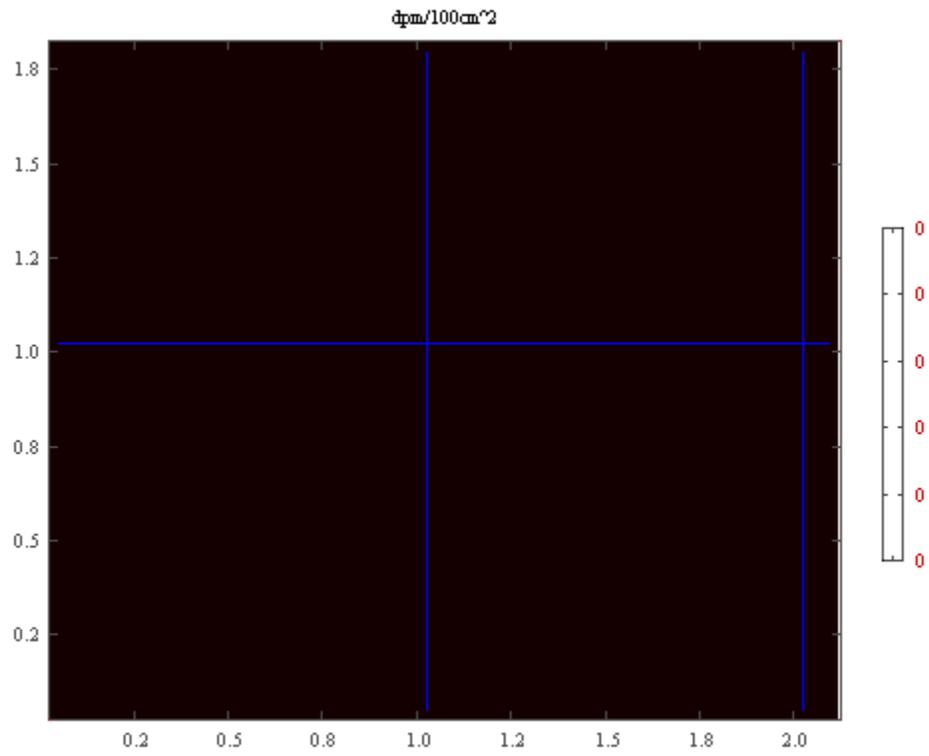


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2811B
Survey Date:	December 15, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

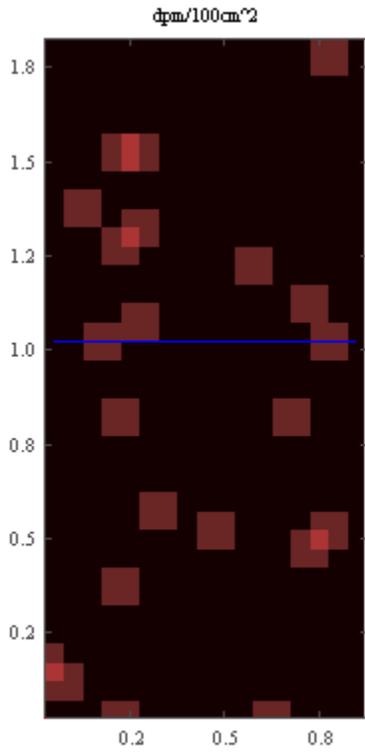


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

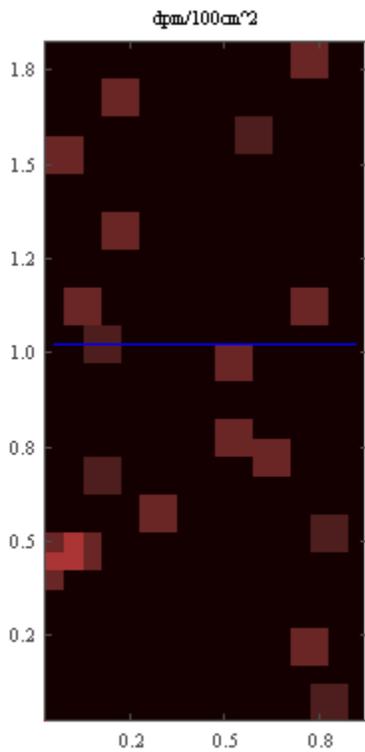


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

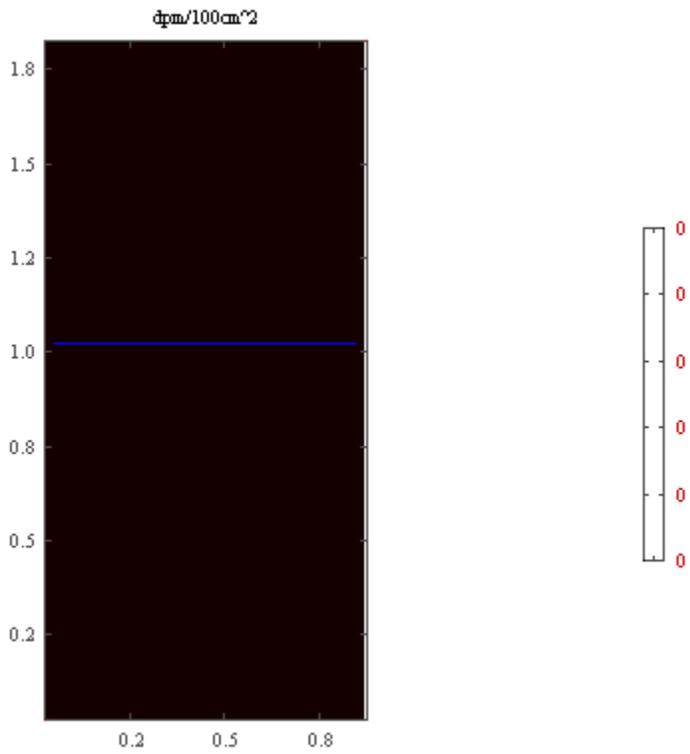


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA2901A
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/VASSETT
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

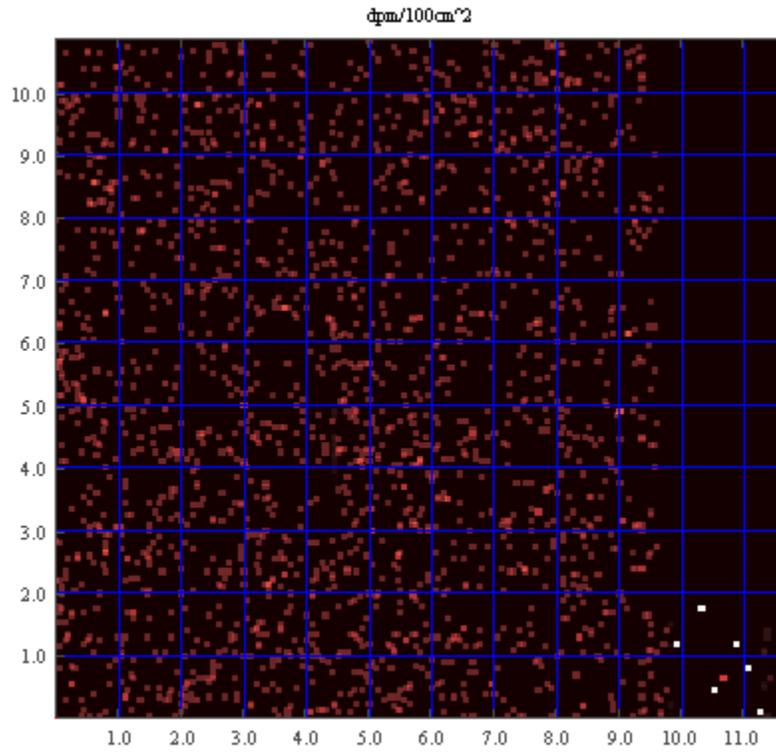


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

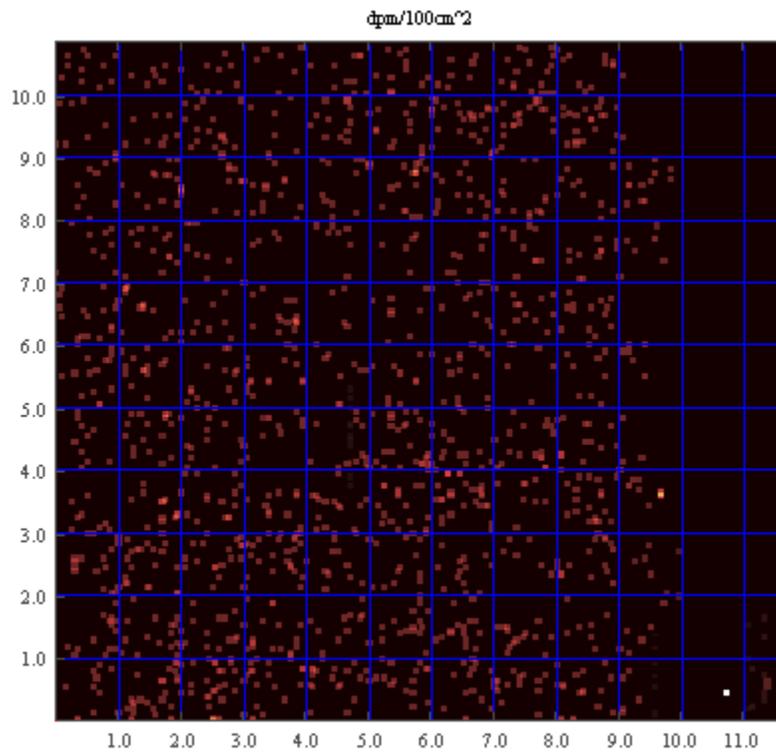


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

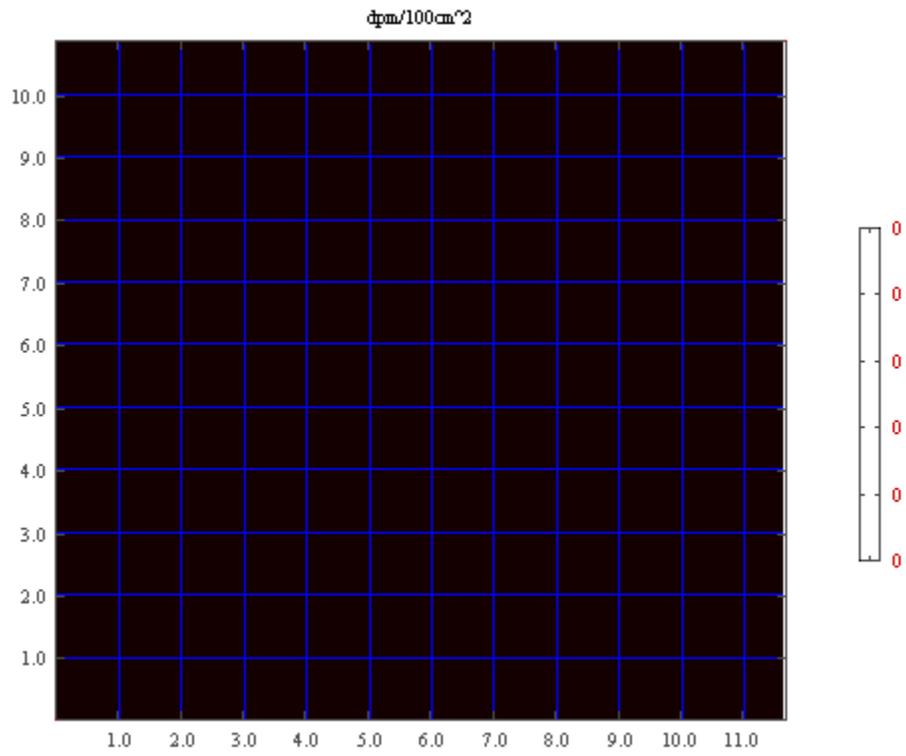


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3001A
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

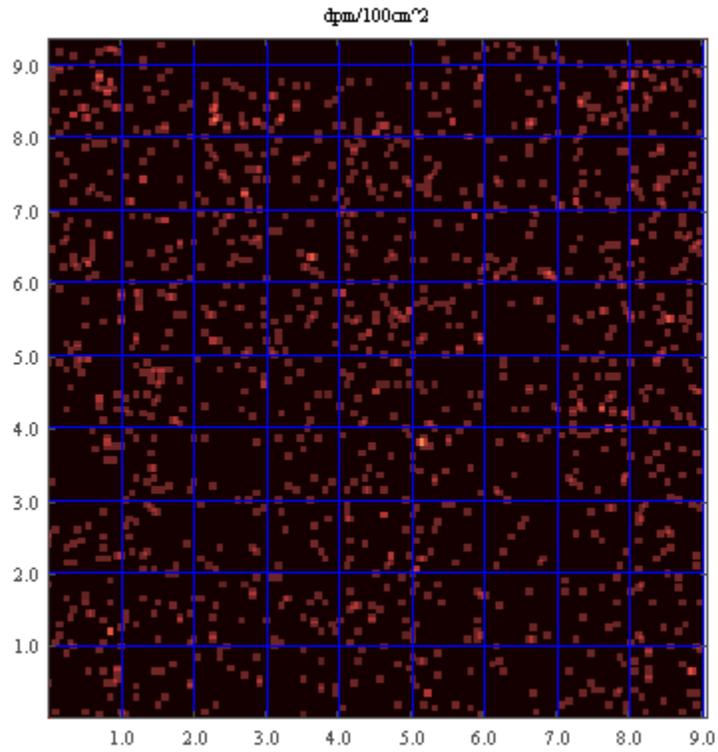


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

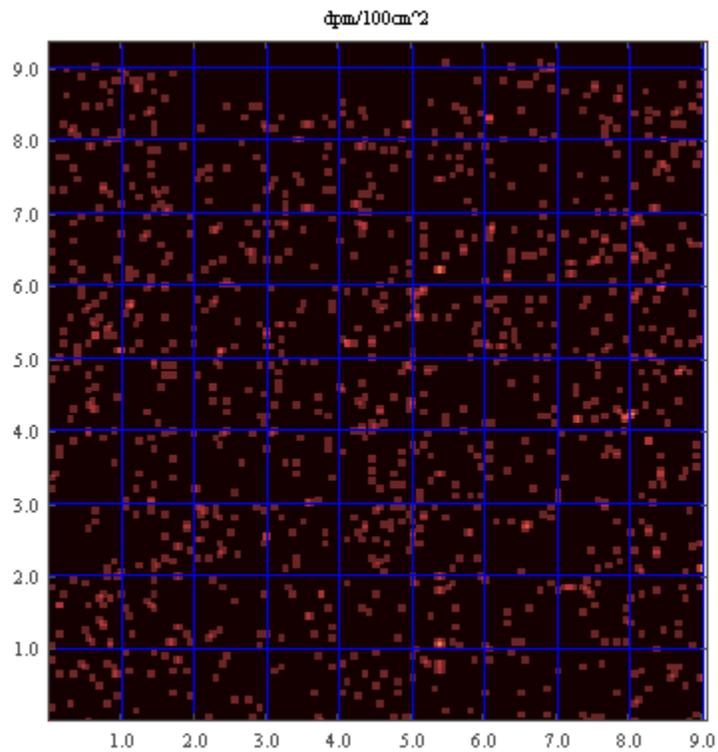


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

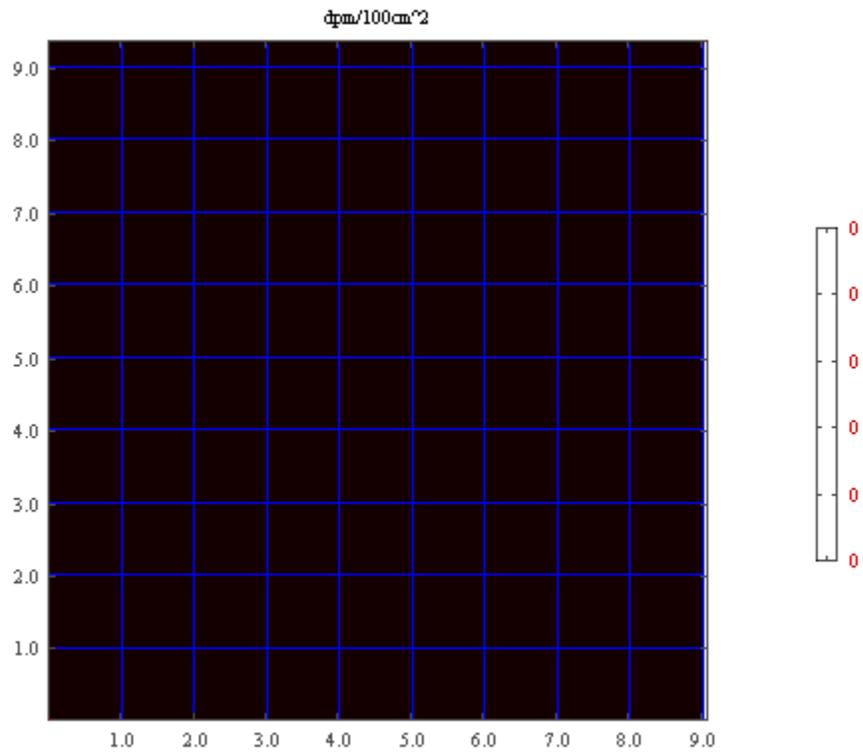


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3001B
Survey Date:	December 15, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

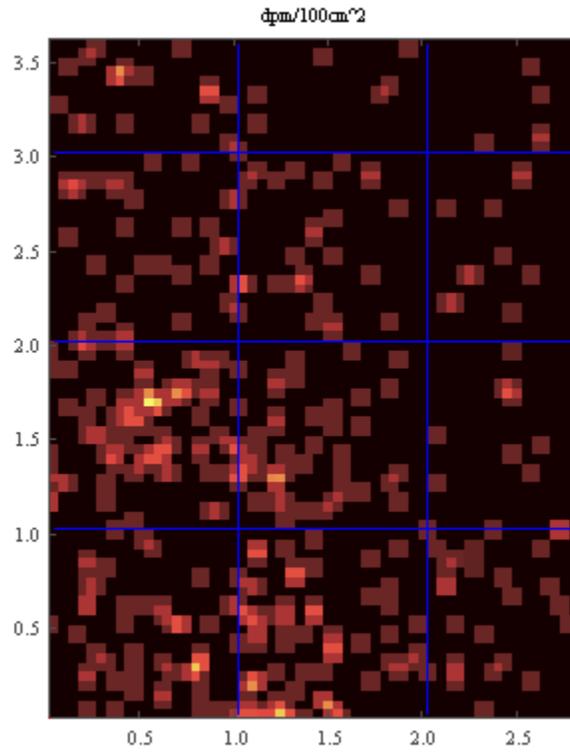


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

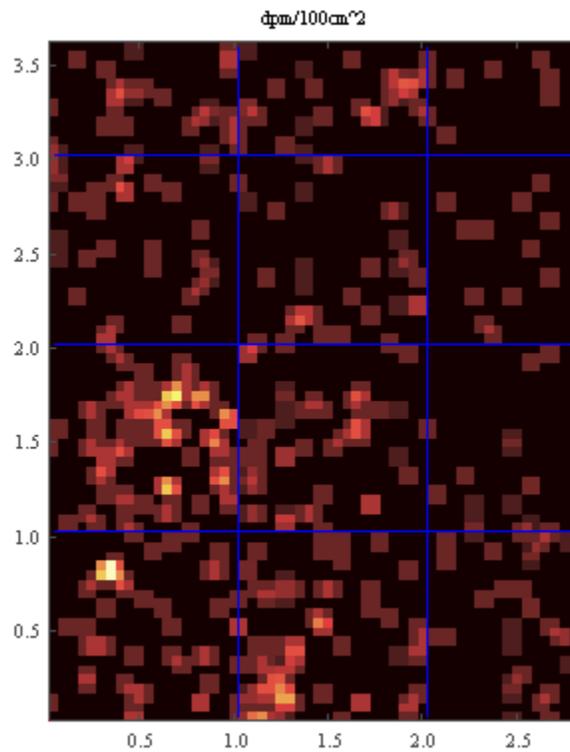


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

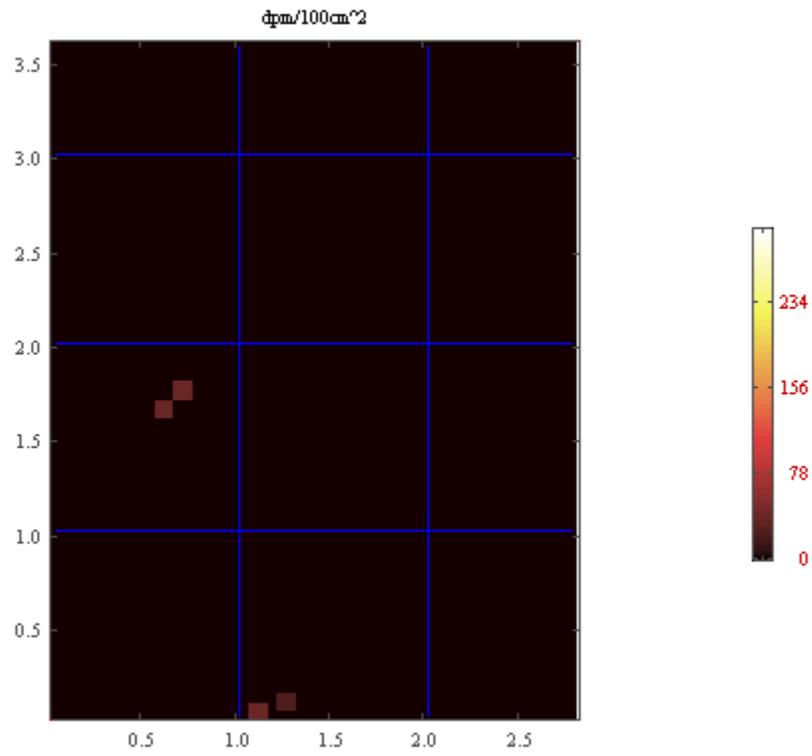


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3011B
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

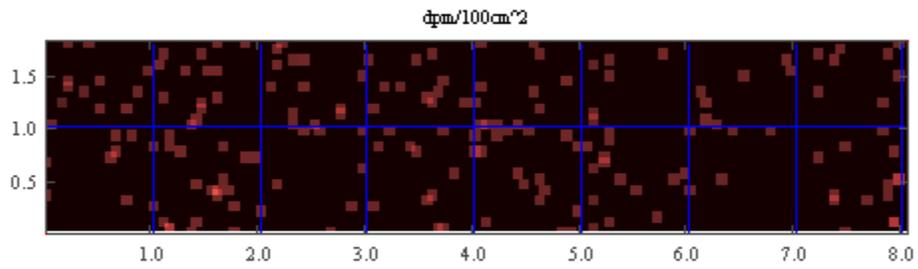


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

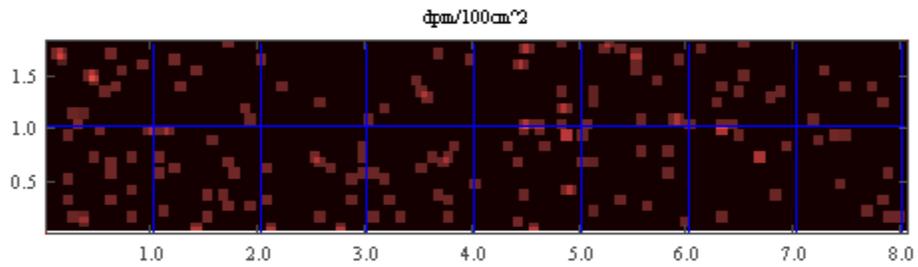


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

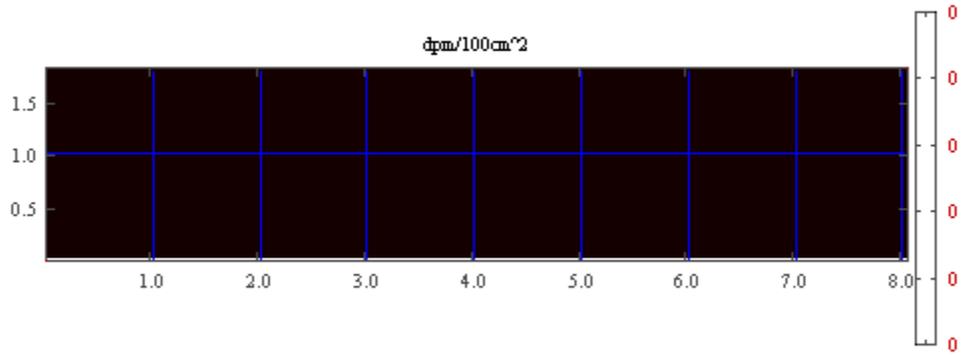


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3011C
Survey Date:	December 16, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

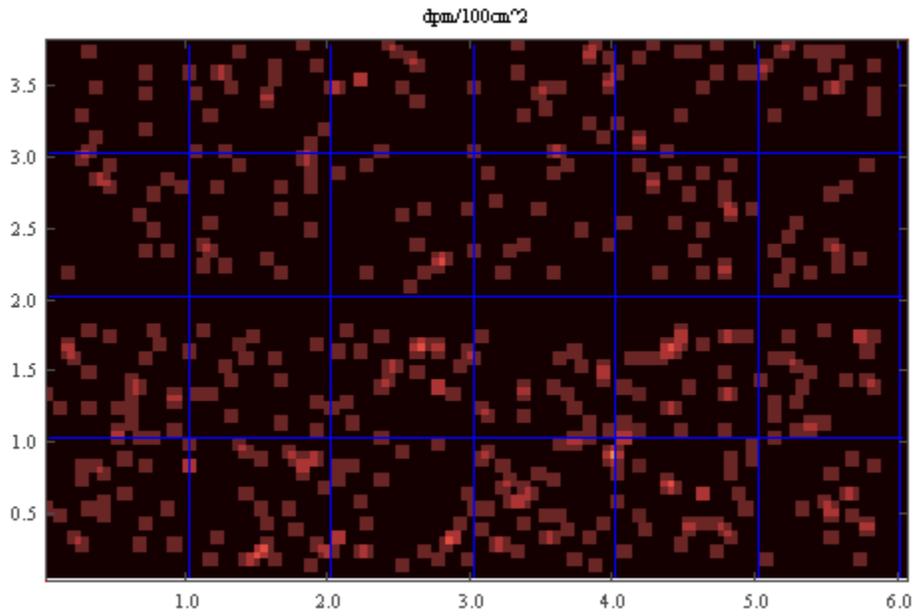


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

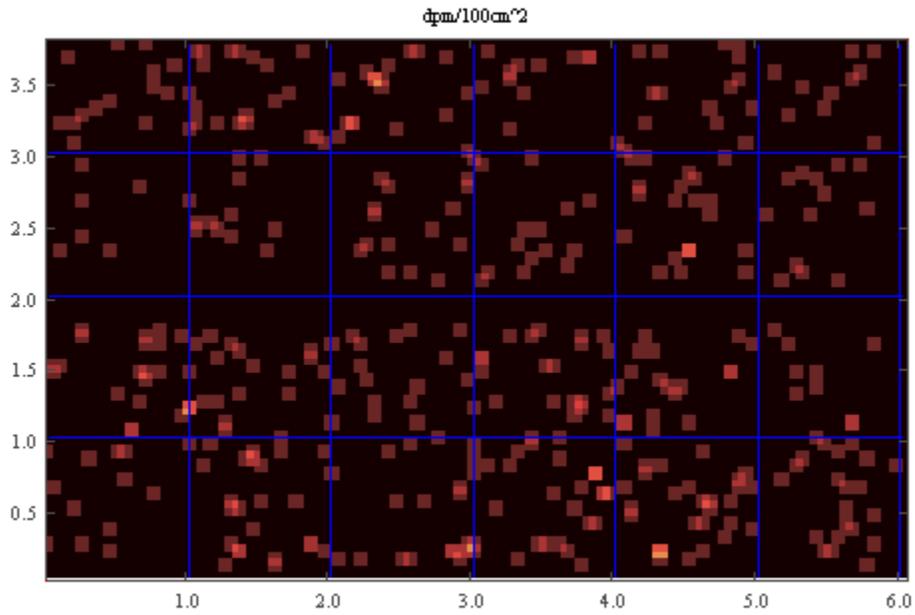


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

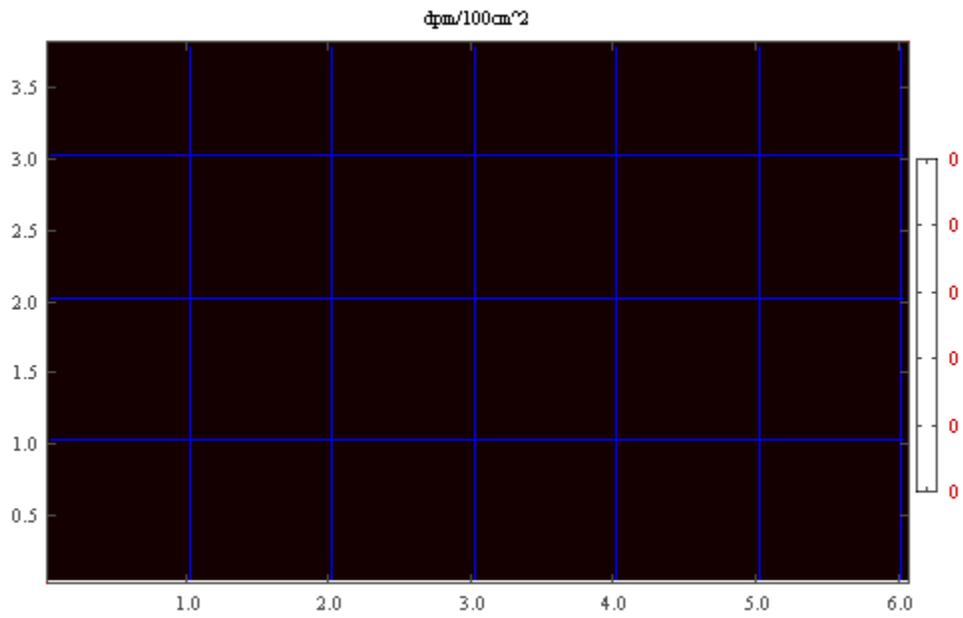


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3021C
Survey Date:	December 20, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

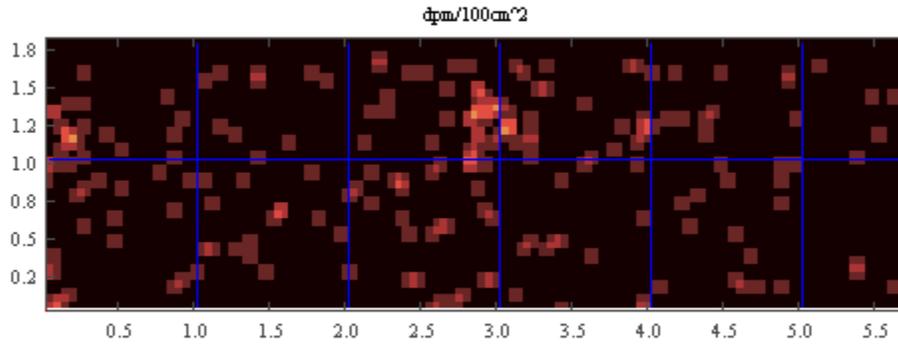


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

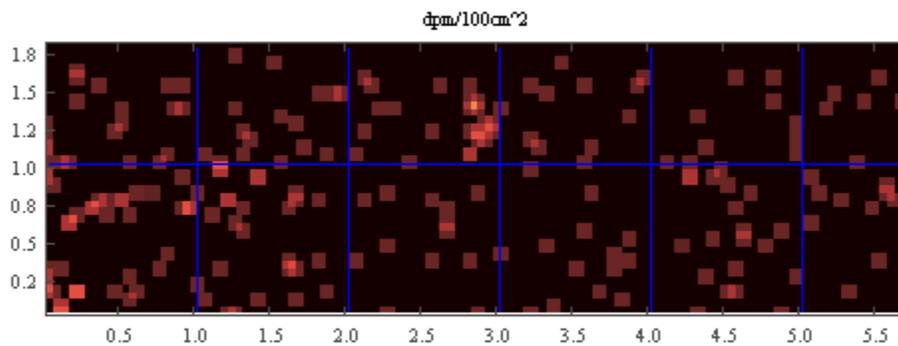


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

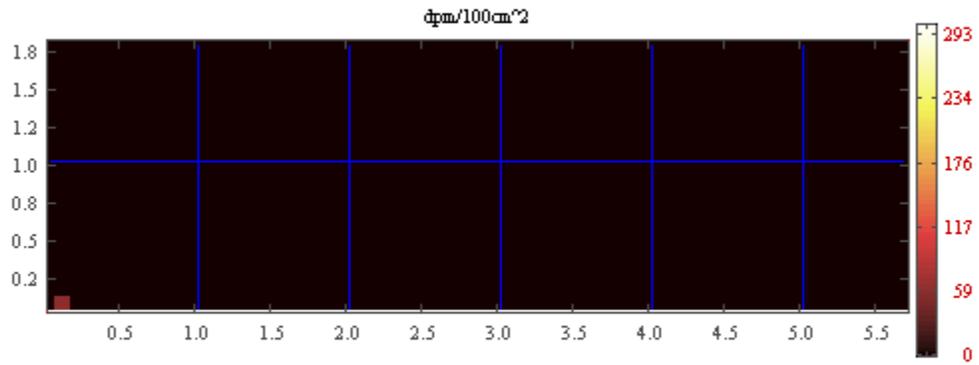


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3021D
Survey Date:	December 20, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

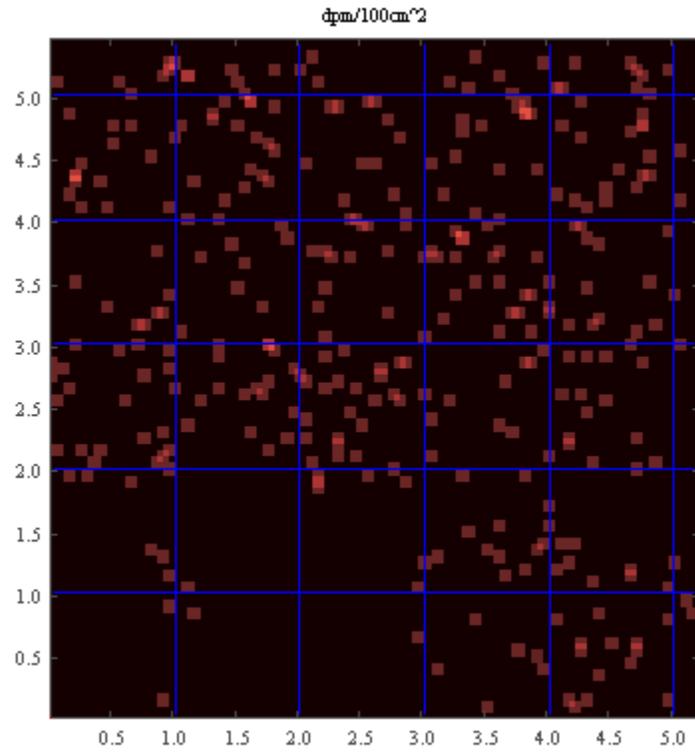


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

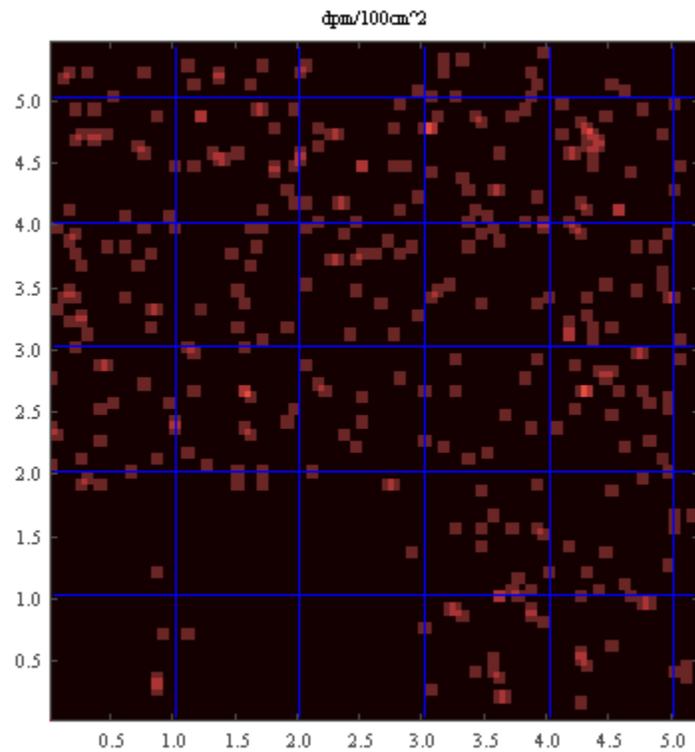


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

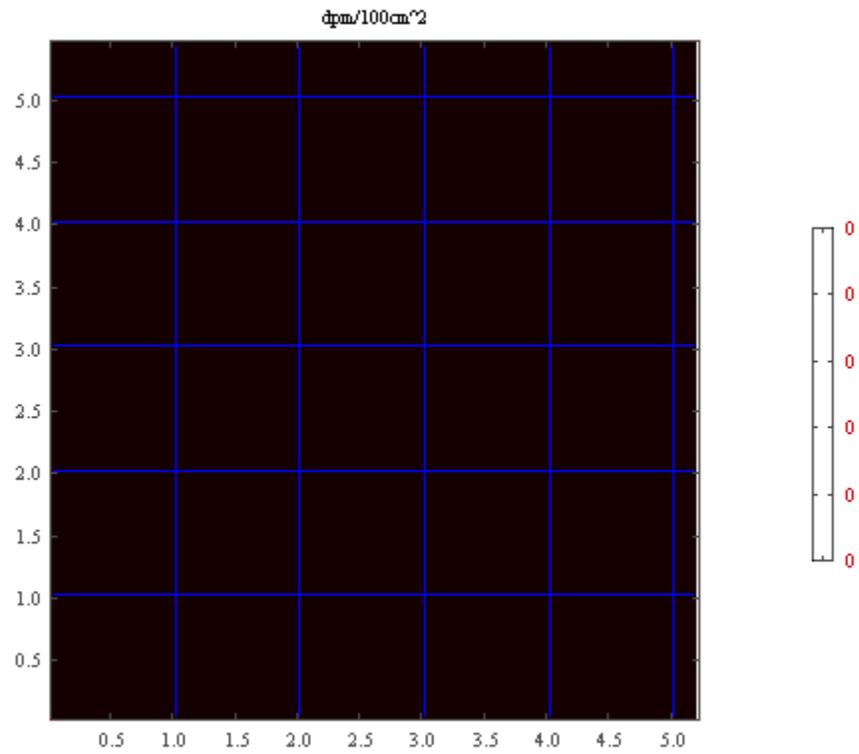


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3031B
Survey Date:	December 20, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

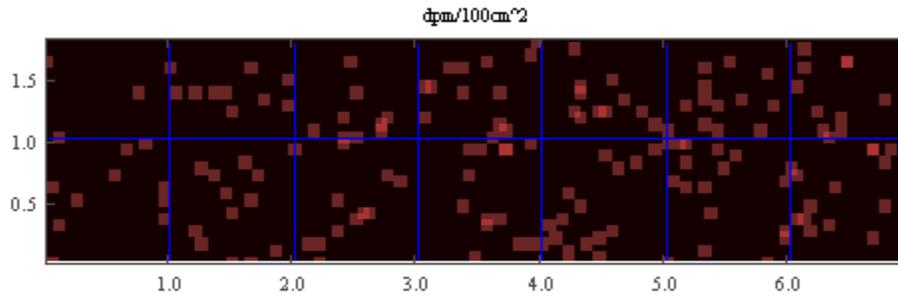


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

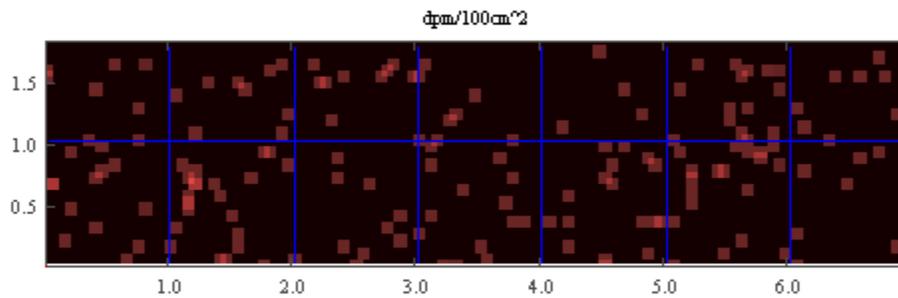


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

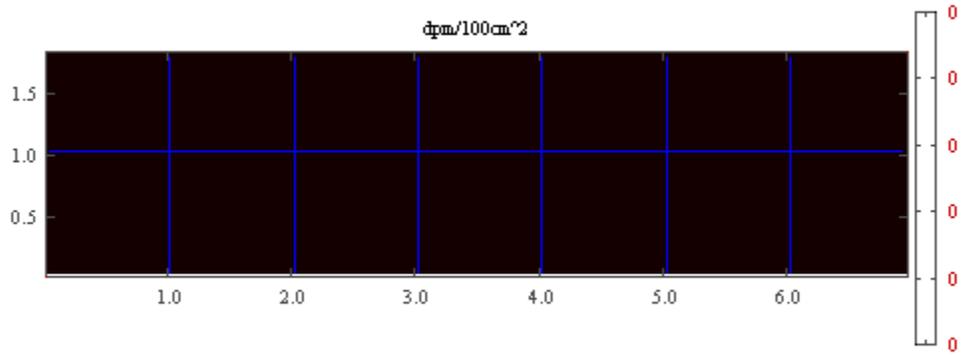


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3101A
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

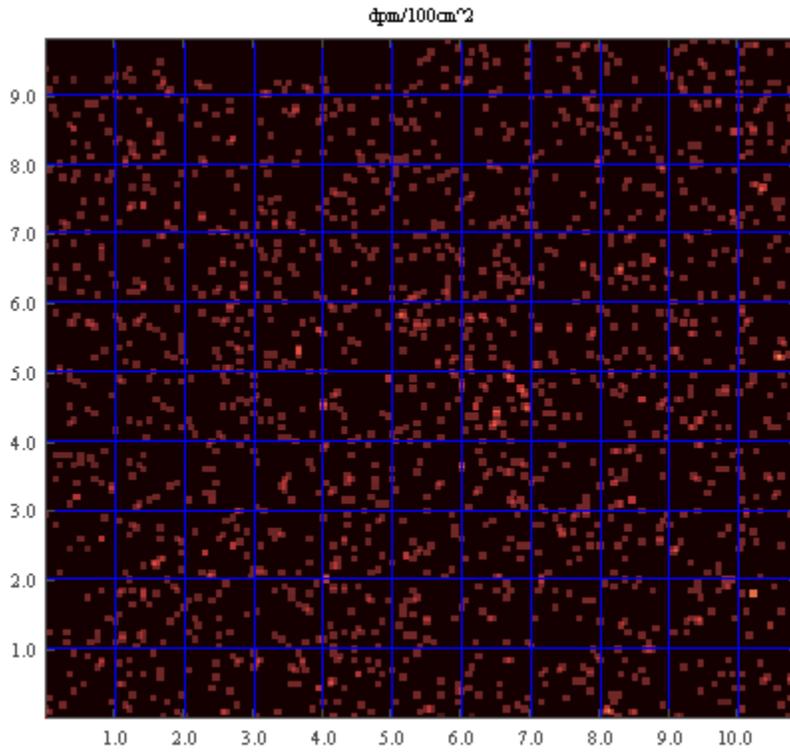


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

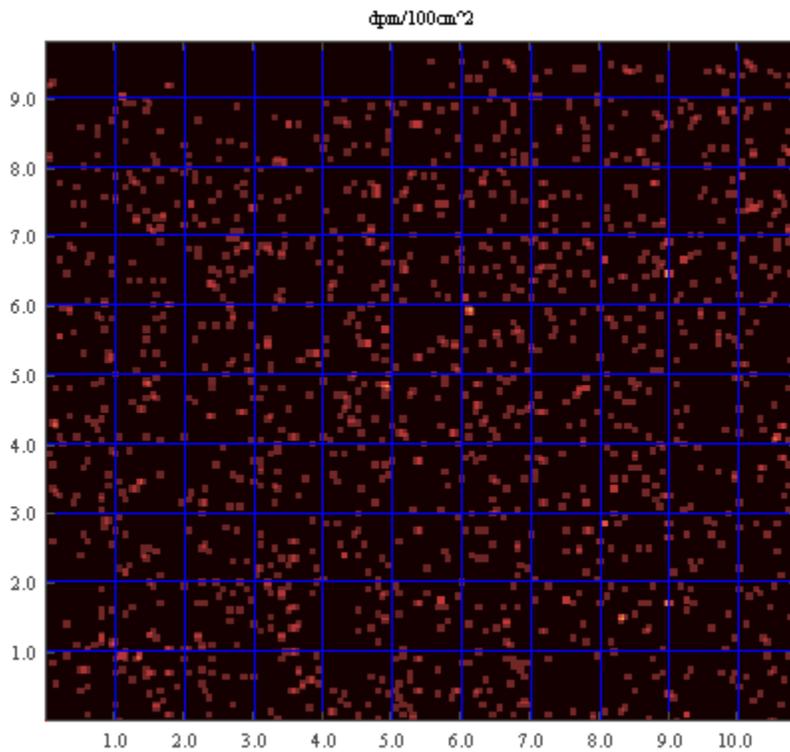


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

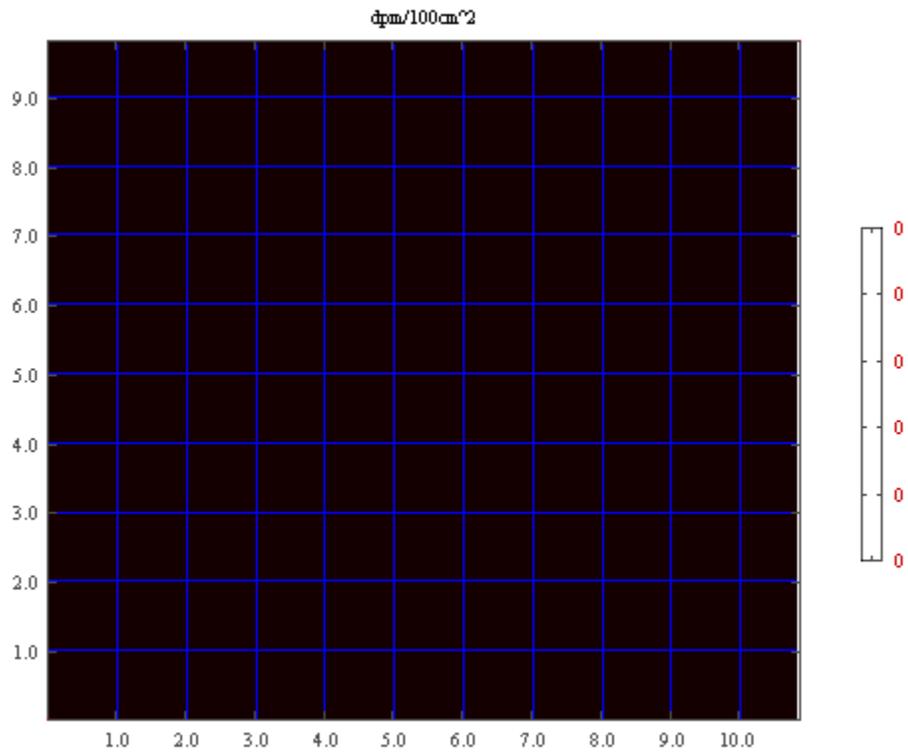


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3201A
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

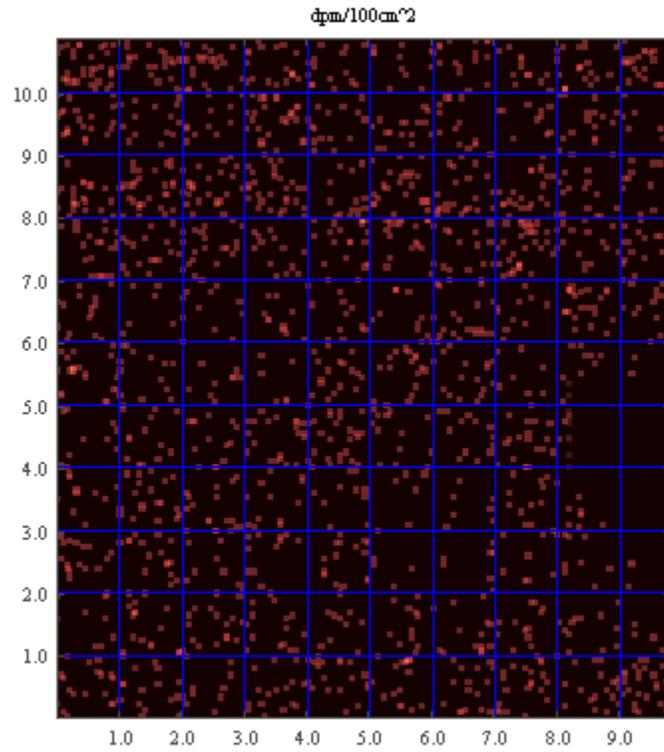


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

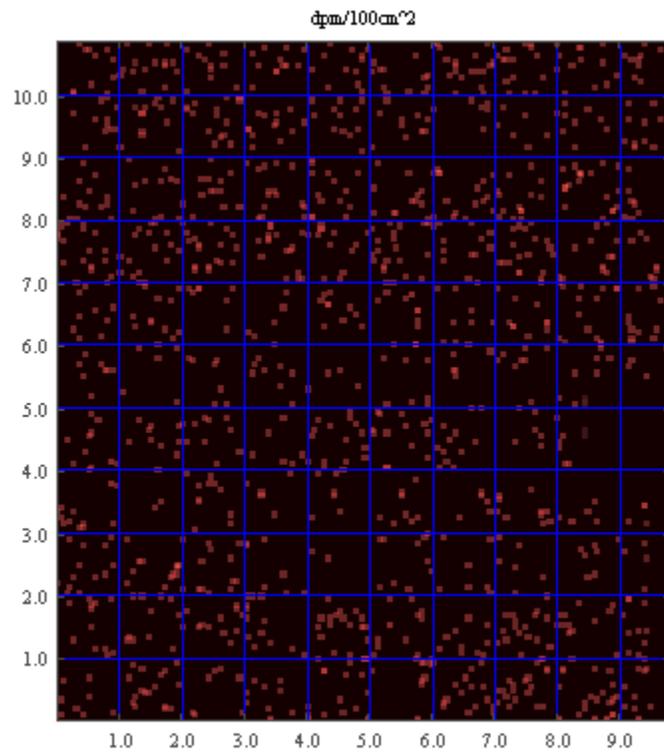


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

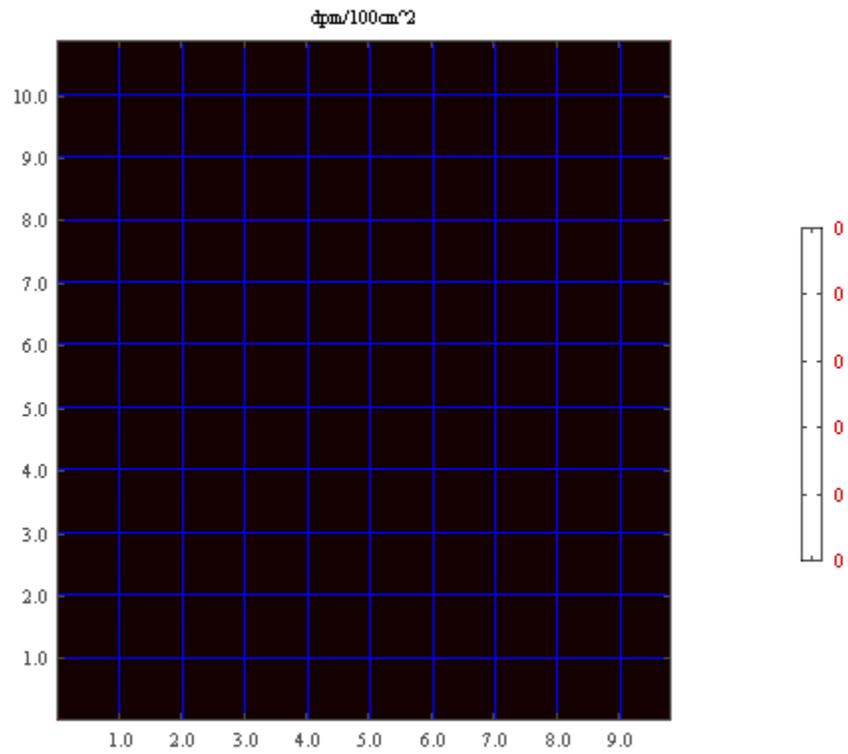


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3201B
Survey Date:	December 21, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

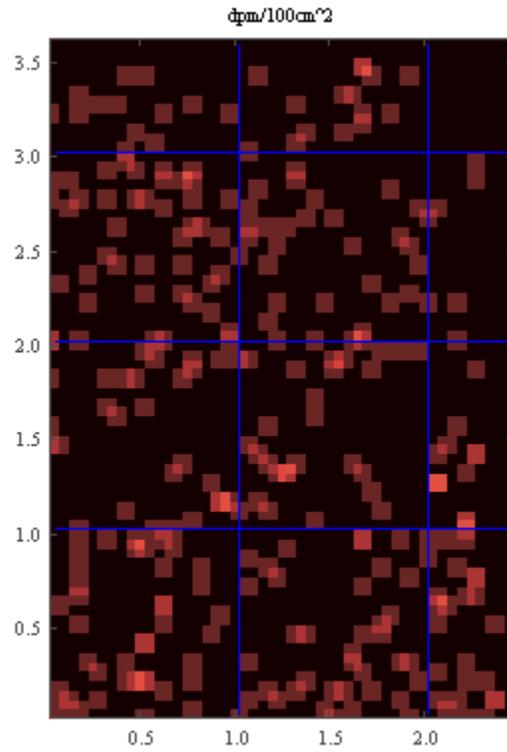


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

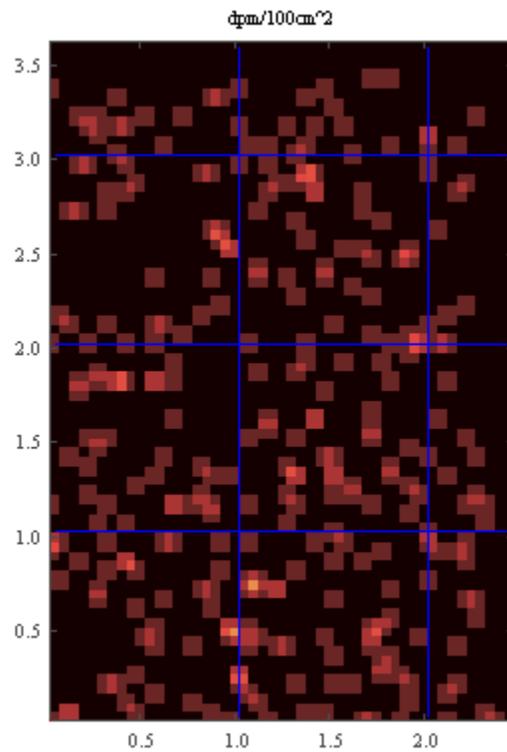


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

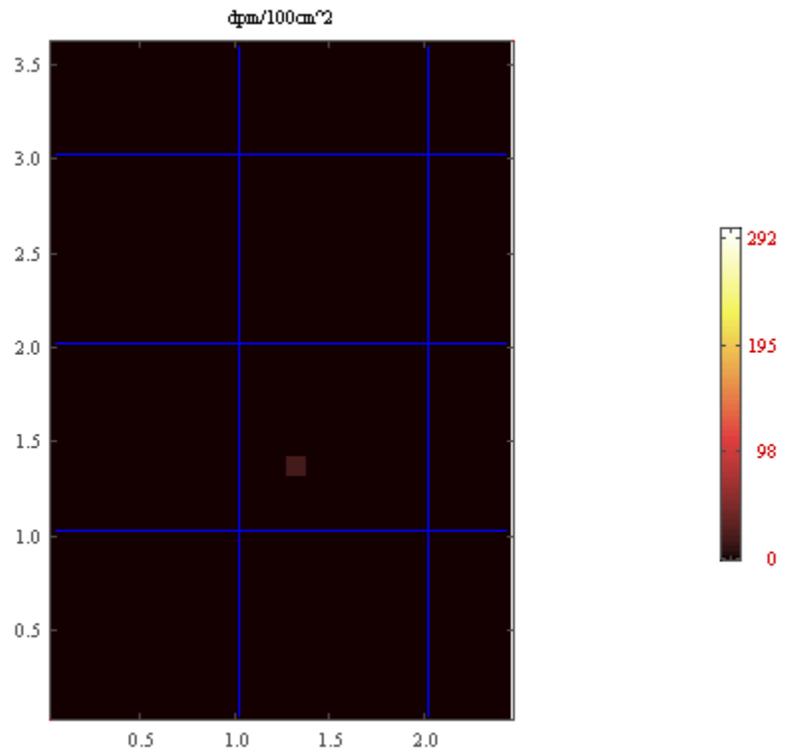


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3301A
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

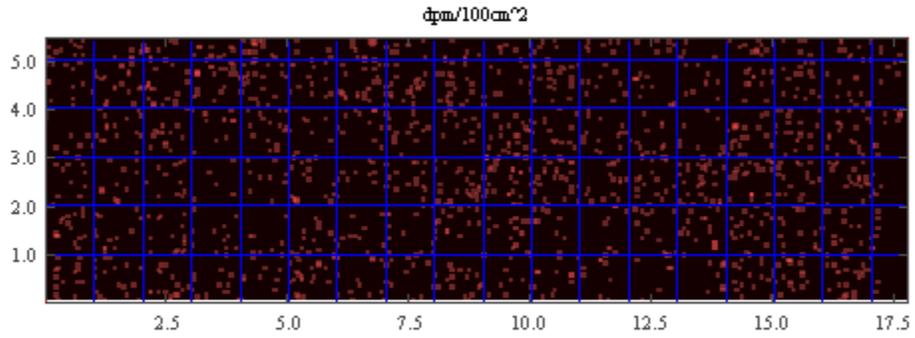


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

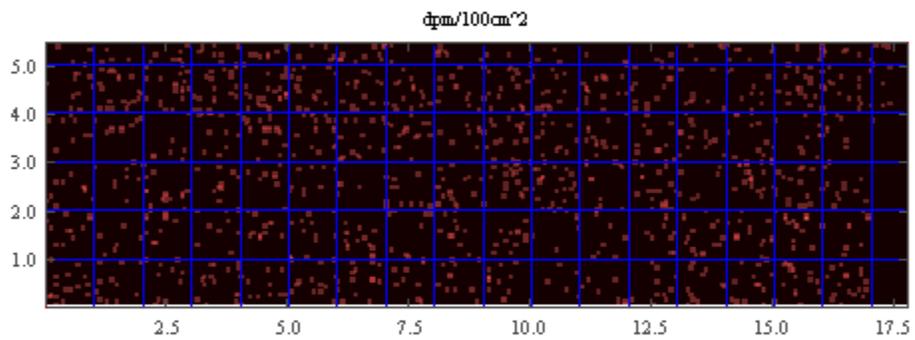


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

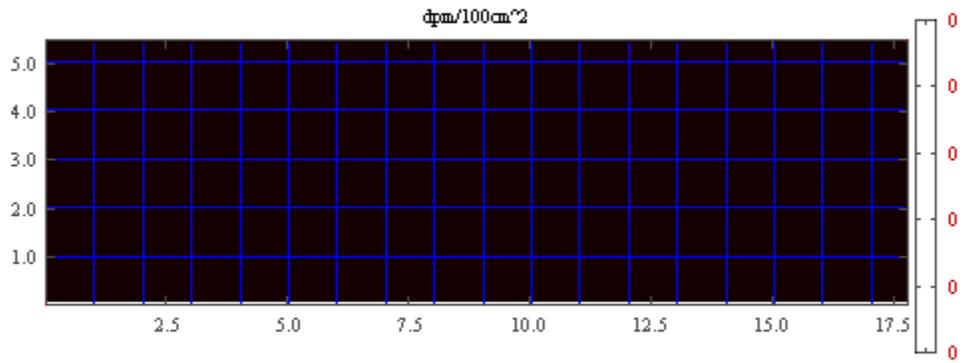


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3301B
Survey Date:	December 21, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	1,424 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.31 m ²

This survey is not position correlated.

Primary Detector:

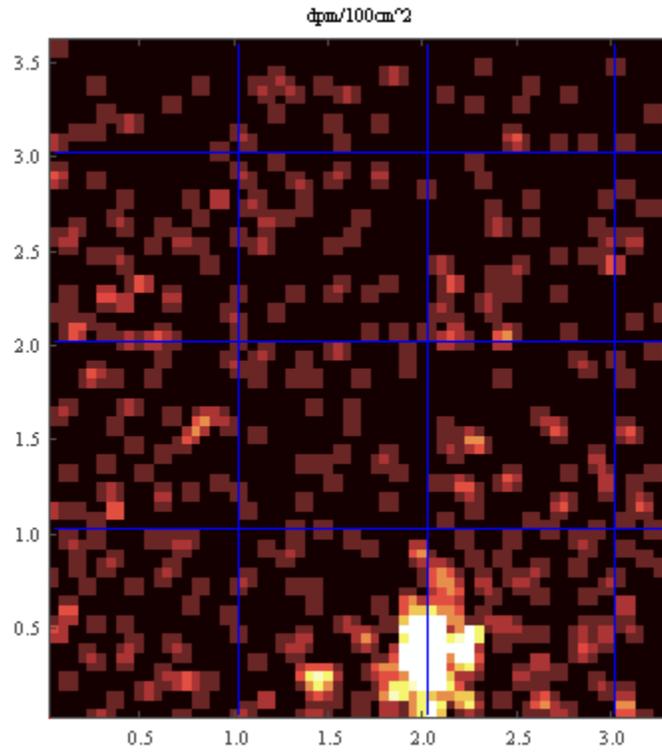


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

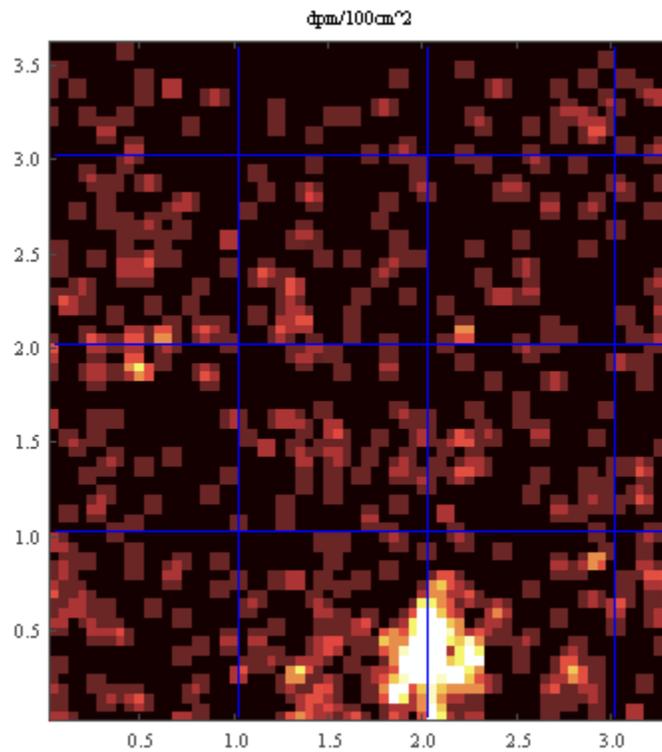


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

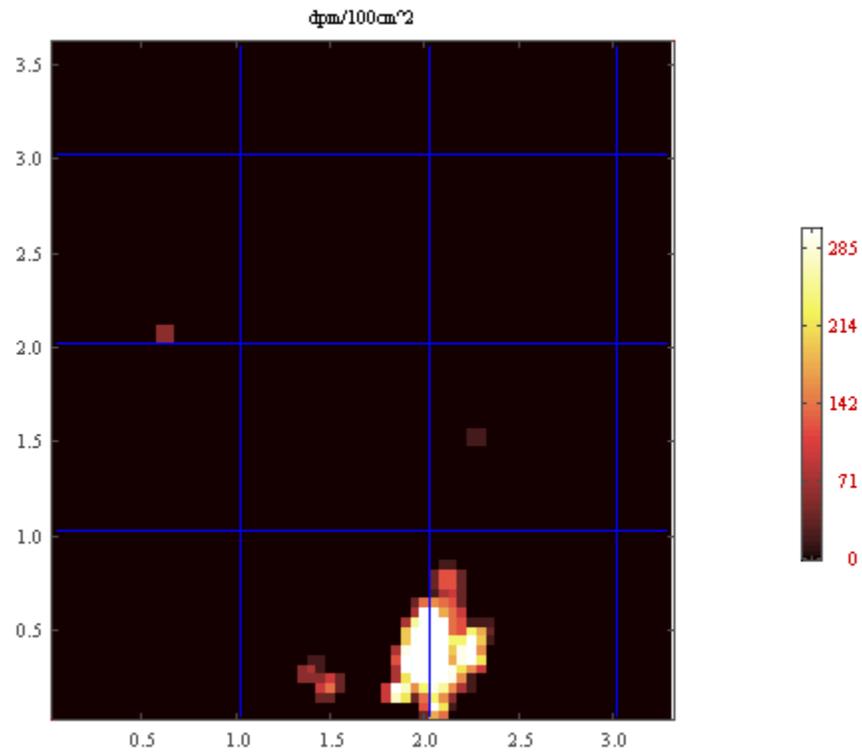


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

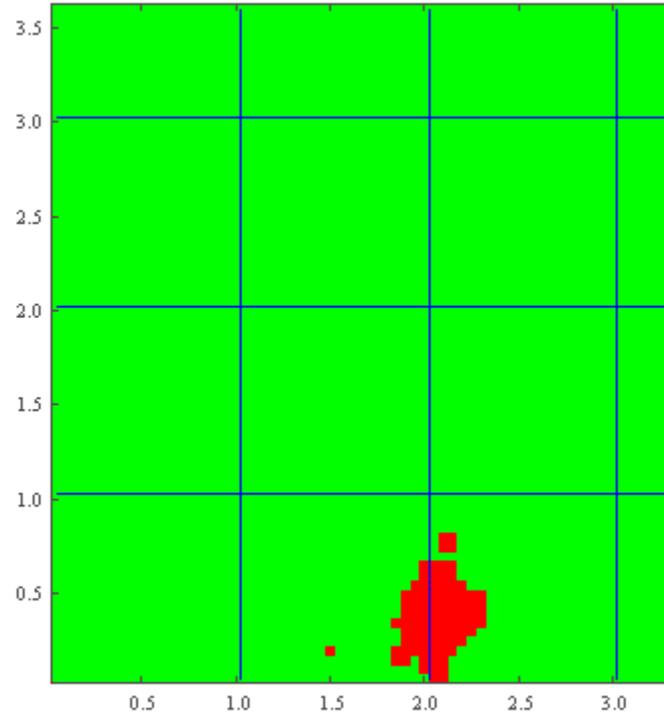


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	1424	42	(205,35)	(0,30)	N/A		
Spot	1131	42	(205,50)	(0,45)	N/A		
Spot	507	38	(190,35)	(5,30)	N/A		
Spot	410	46	(225,40)	(0,35)	N/A		
Spot	312	42	(205,10)	(0,5)	N/A		
Spot	312	38	(185,20)	(0,15)	N/A		
Spot	195	38	(190,50)	(5,45)	N/A		
Spot	156	44	(220,25)	(5,20)	N/A		
Spot	156	42	(205,65)	(0,60)	N/A		
Spot	136	30	(150,20)	(5,15)	N/A		
Spot	117	44	(220,55)	(5,50)	N/A		
Spot	117	44	(215,80)	(0,75)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA3311D
Survey Date:	January 12, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

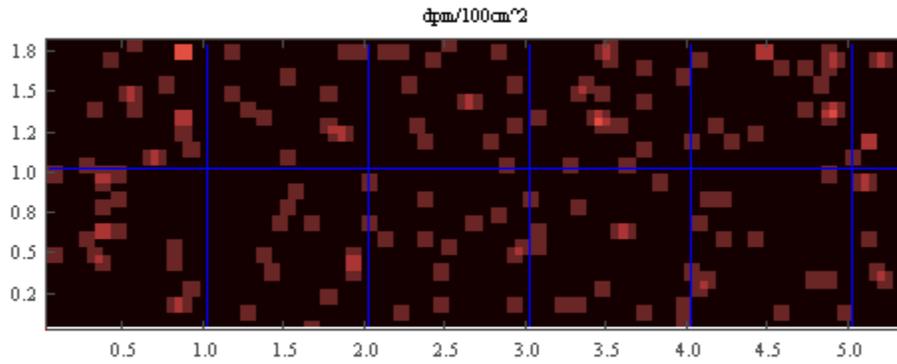


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

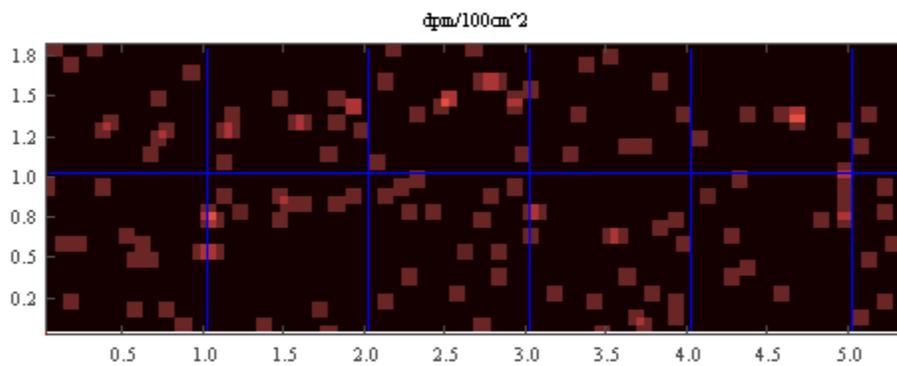


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

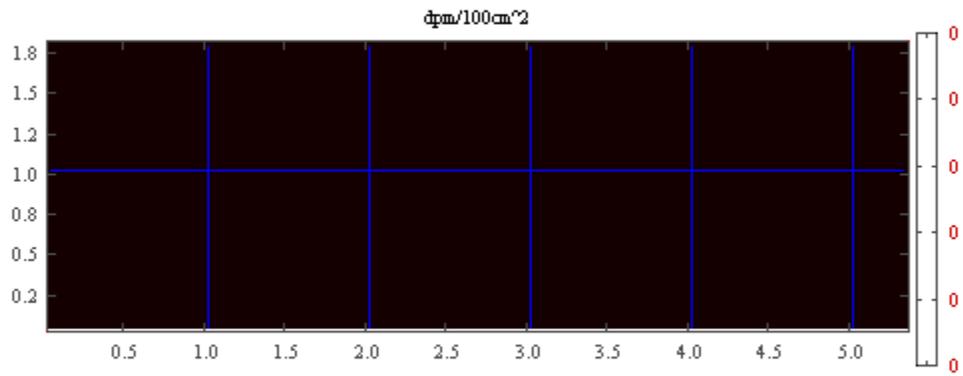


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3321A
Survey Date:	January 12, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

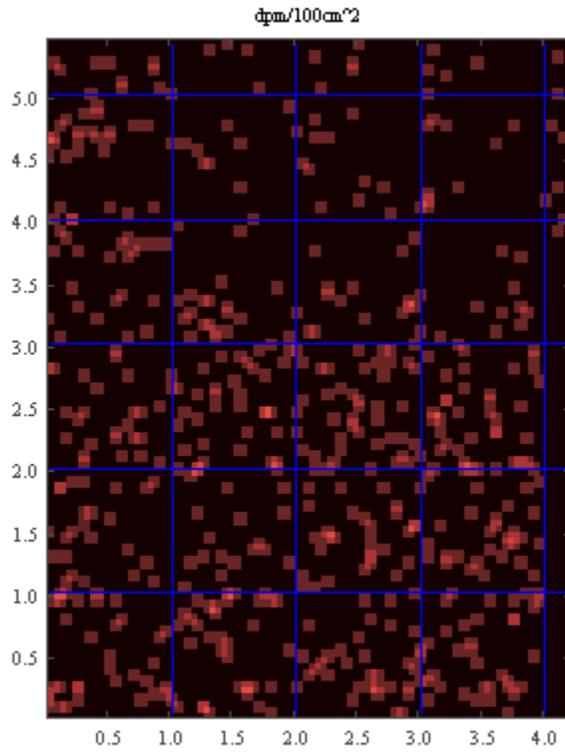


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

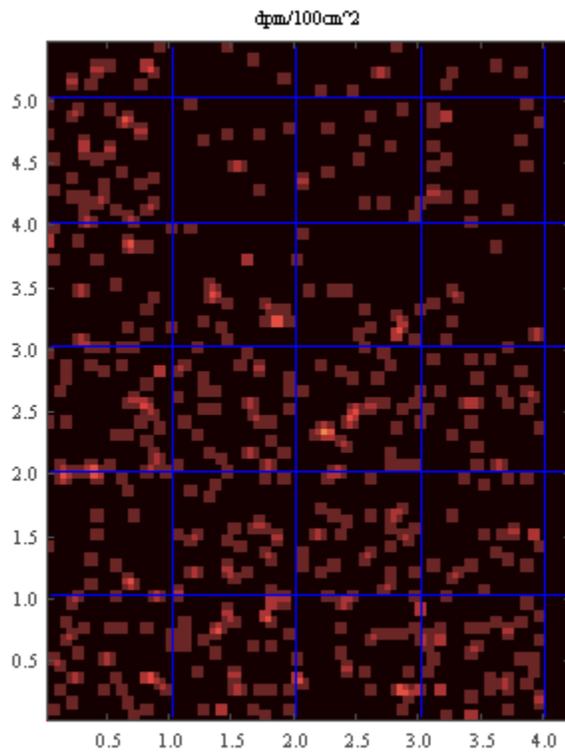


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

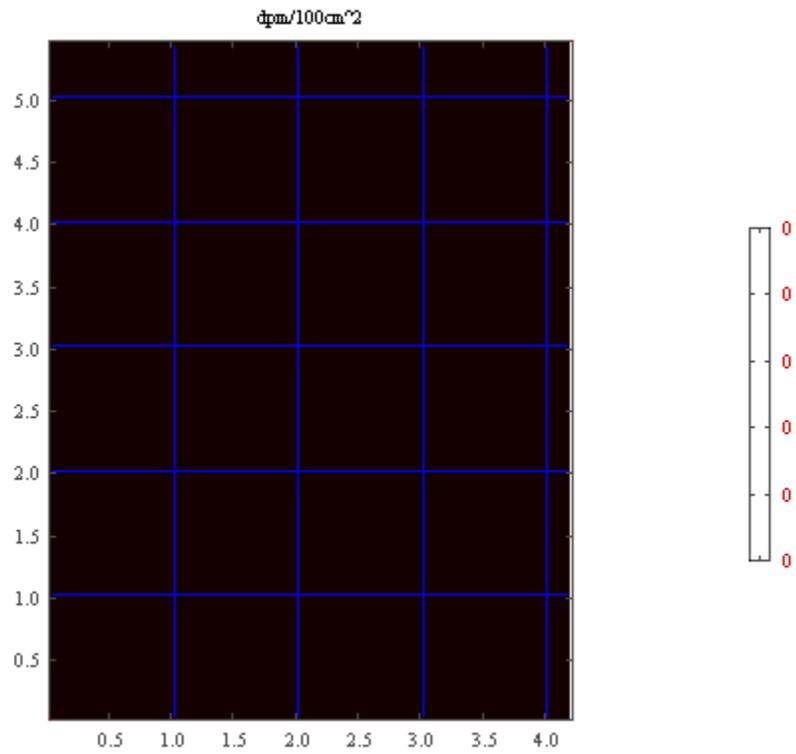


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3401A
Survey Date:	October 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

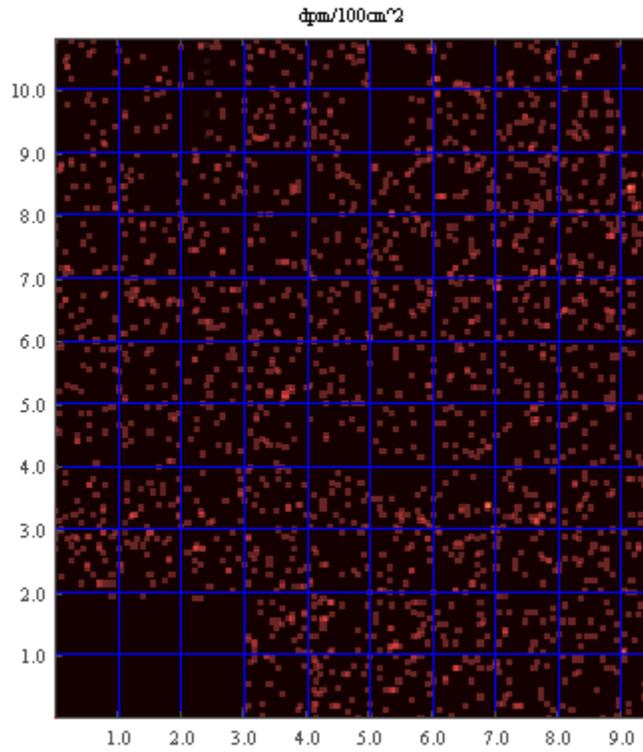


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

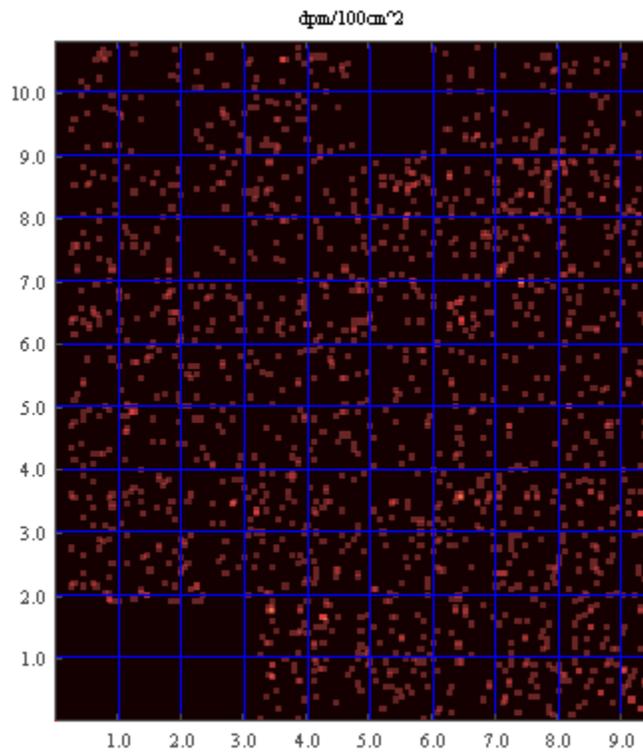


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

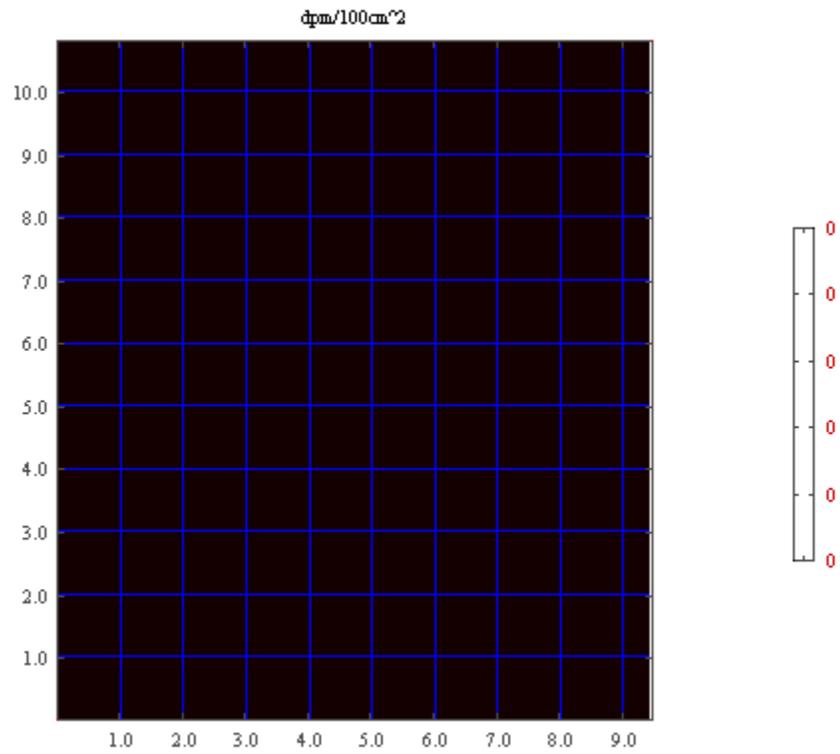


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3401B
Survey Date:	October 23, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

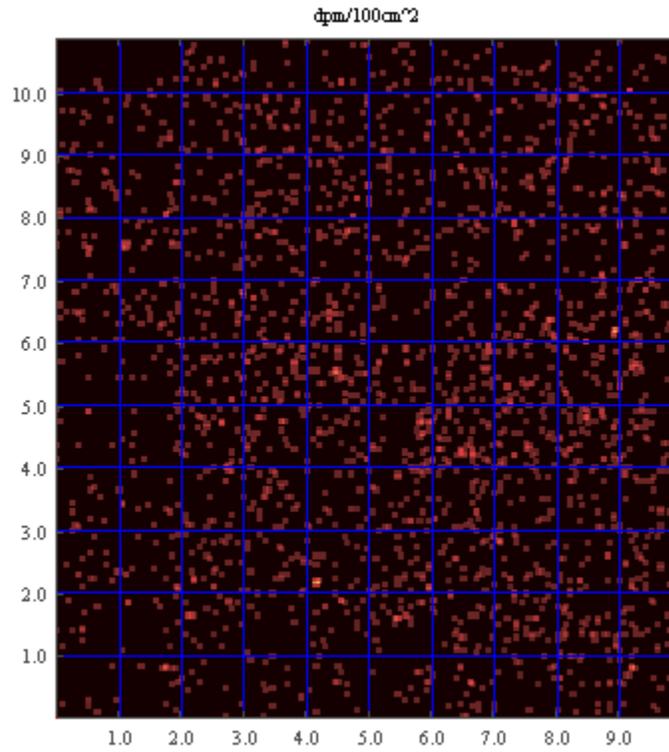


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

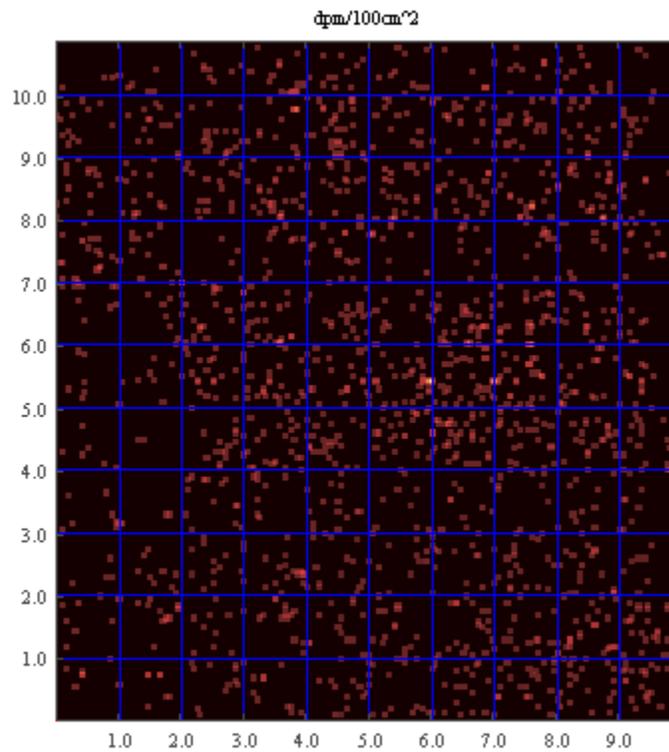


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

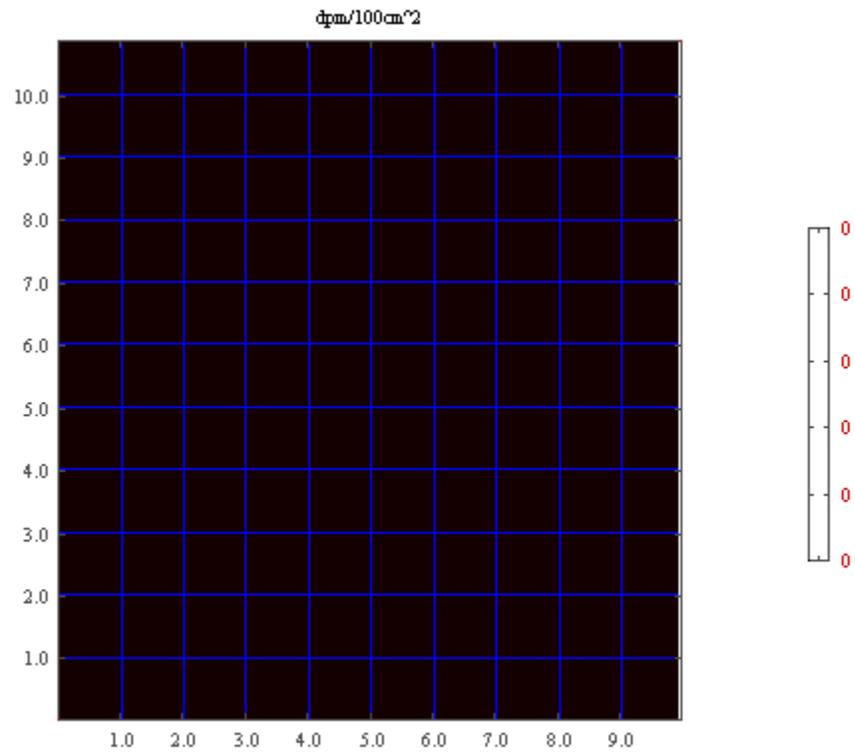


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3401C
Survey Date:	October 25, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

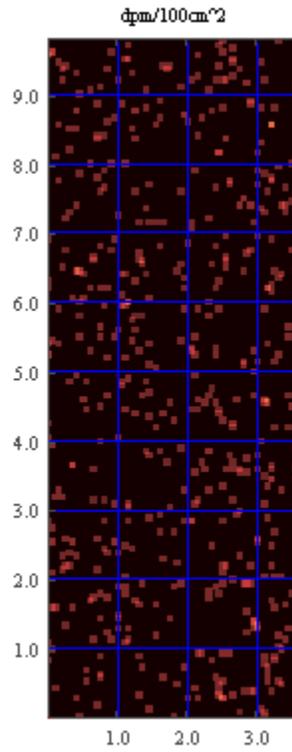


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

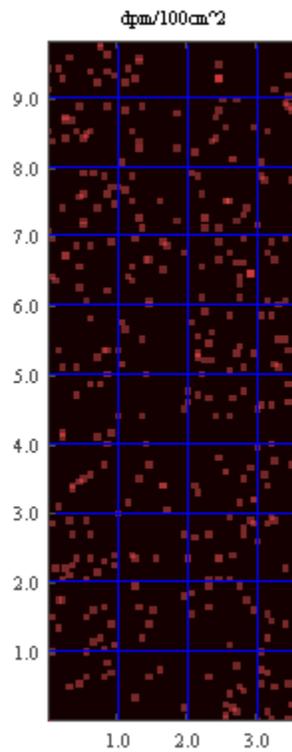


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

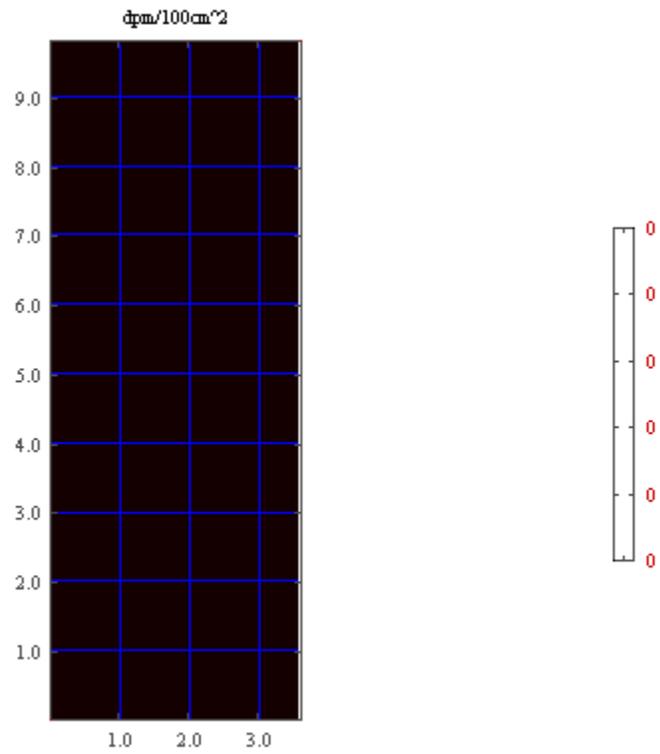


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3401D
Survey Date:	October 25, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

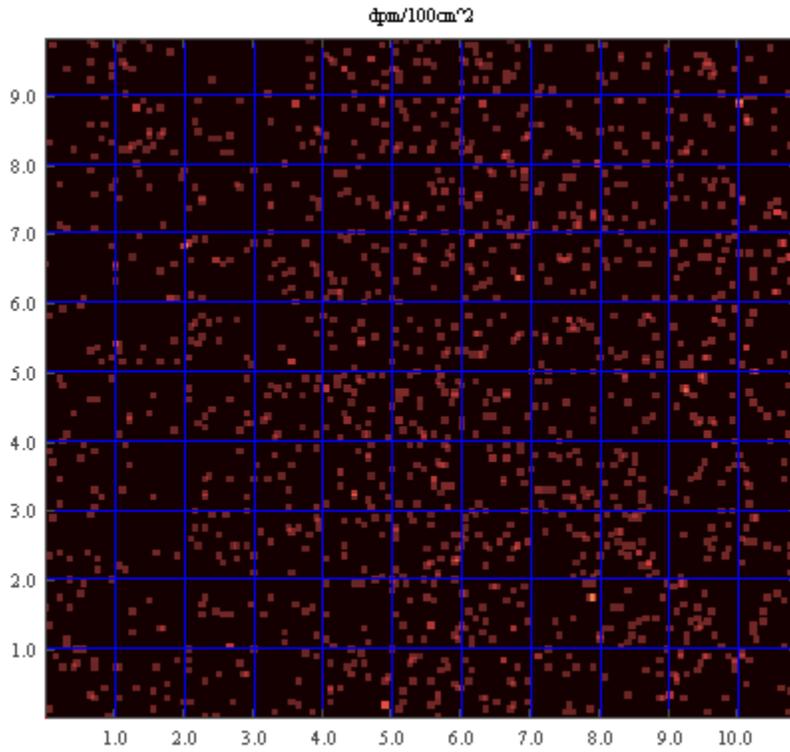


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

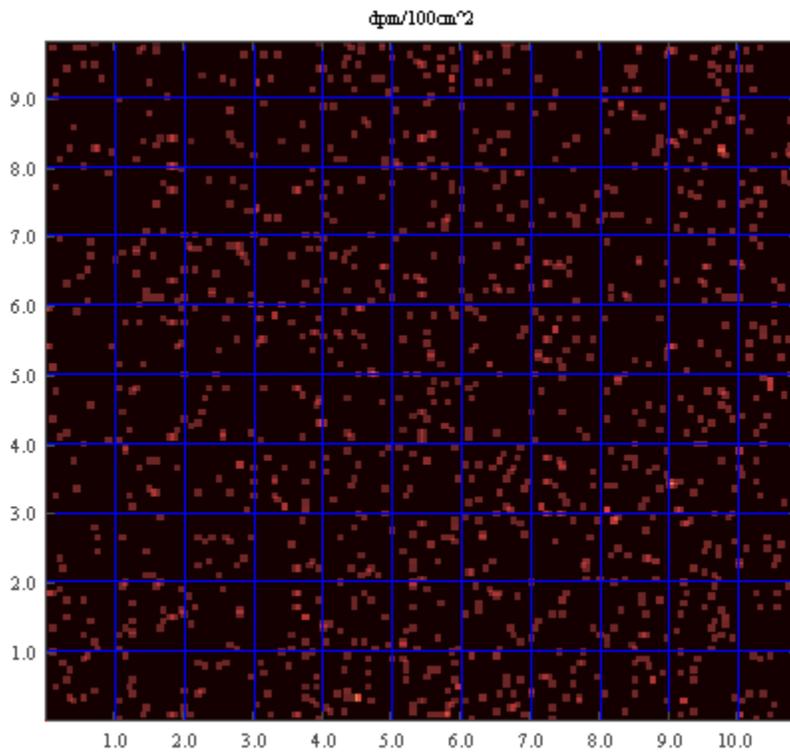


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

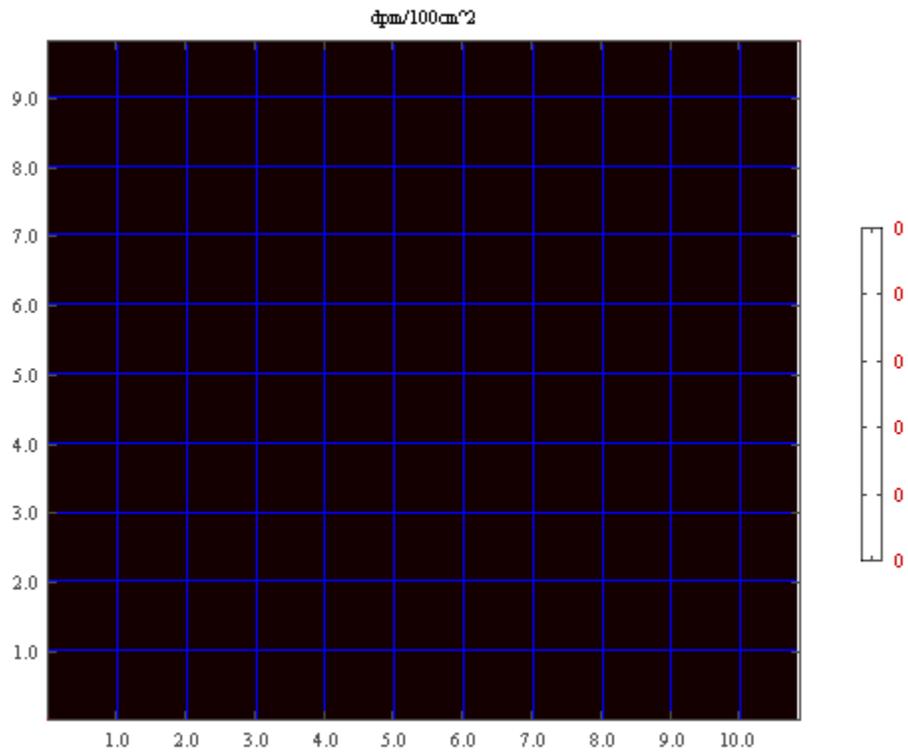


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3401E
Survey Date:	October 25, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

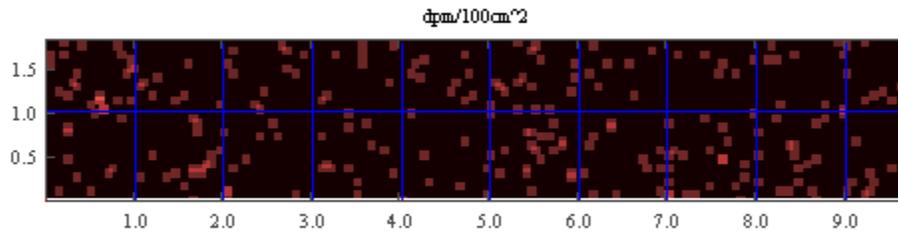


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

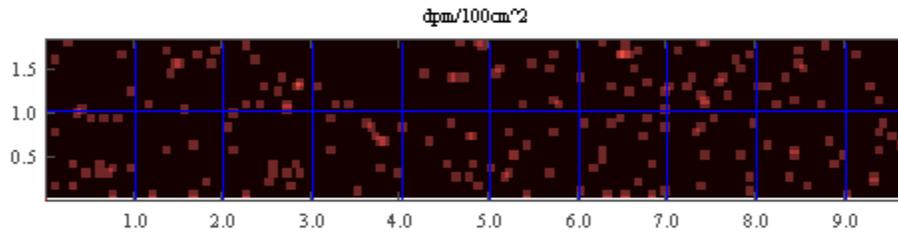


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

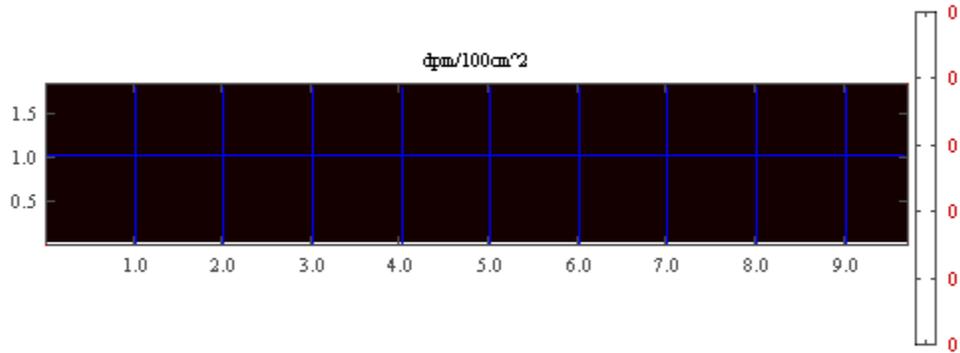


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3401F
Survey Date:	October 25, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

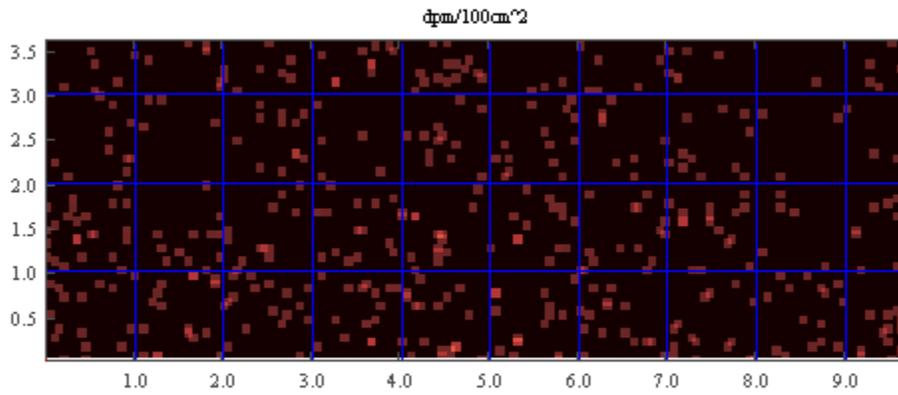


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

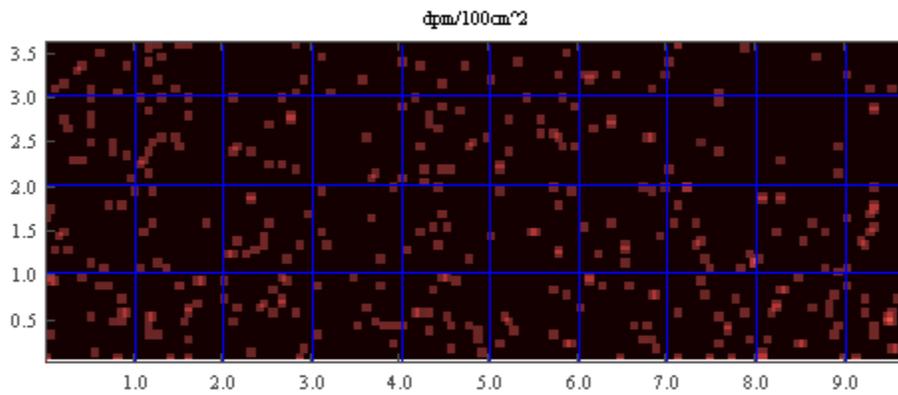


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

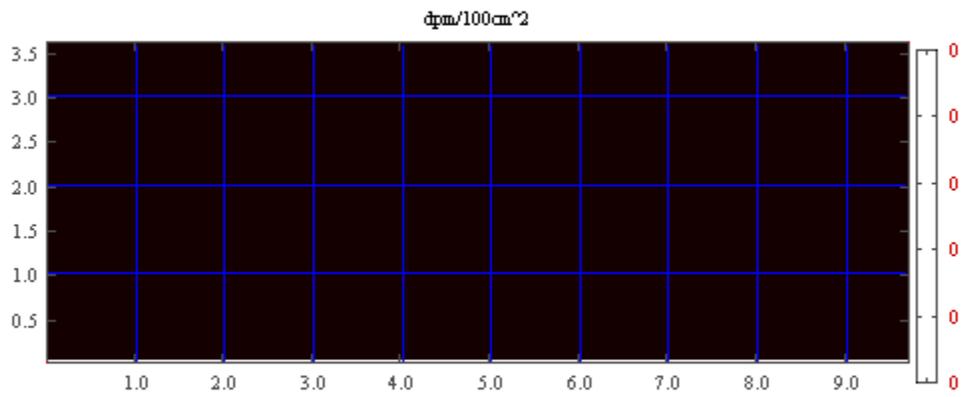


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3411B
Survey Date:	October 27, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

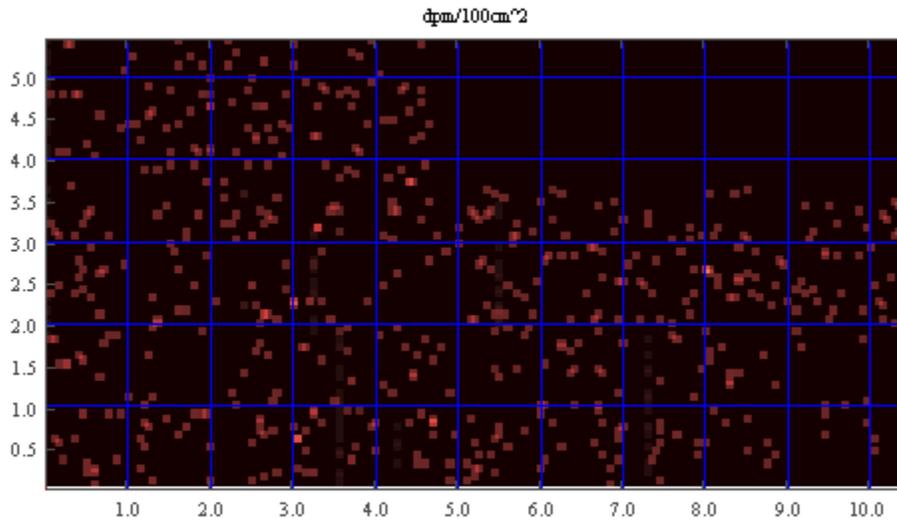


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

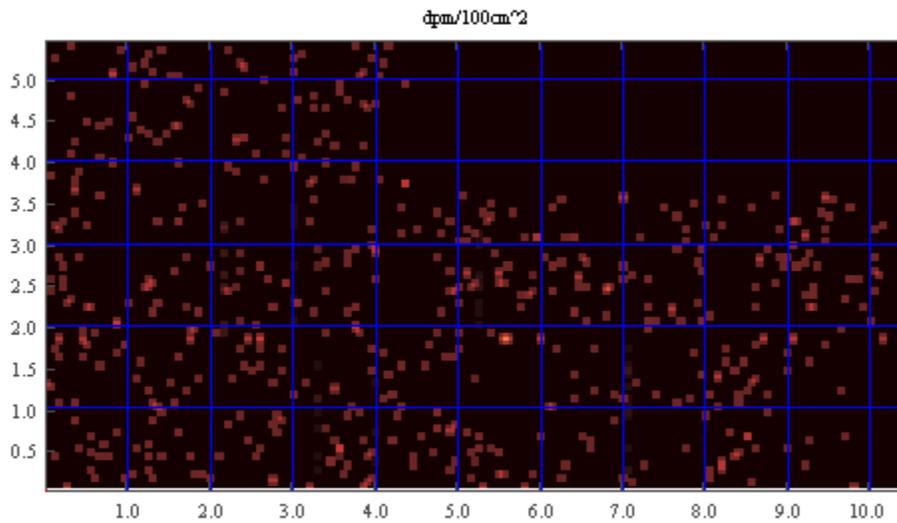


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

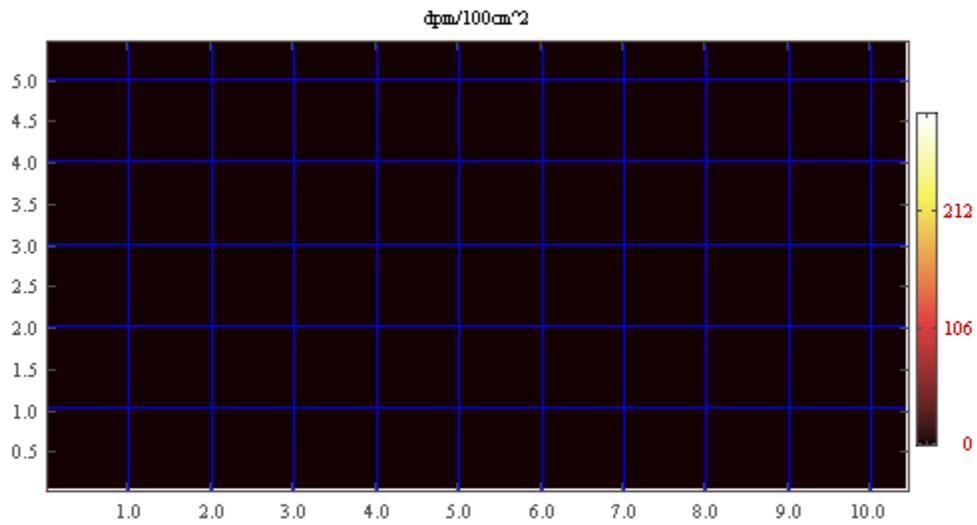


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3411E
Survey Date:	March 8, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

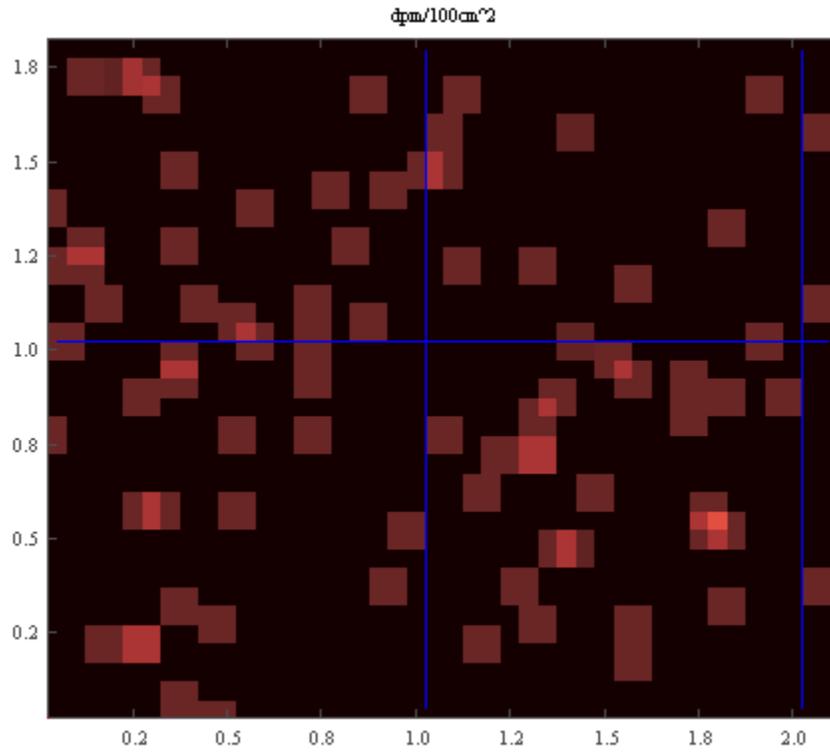


Figure 1: Meter Grid overlaid onto image plot of 100cm^2 areas..

Recount Detector:

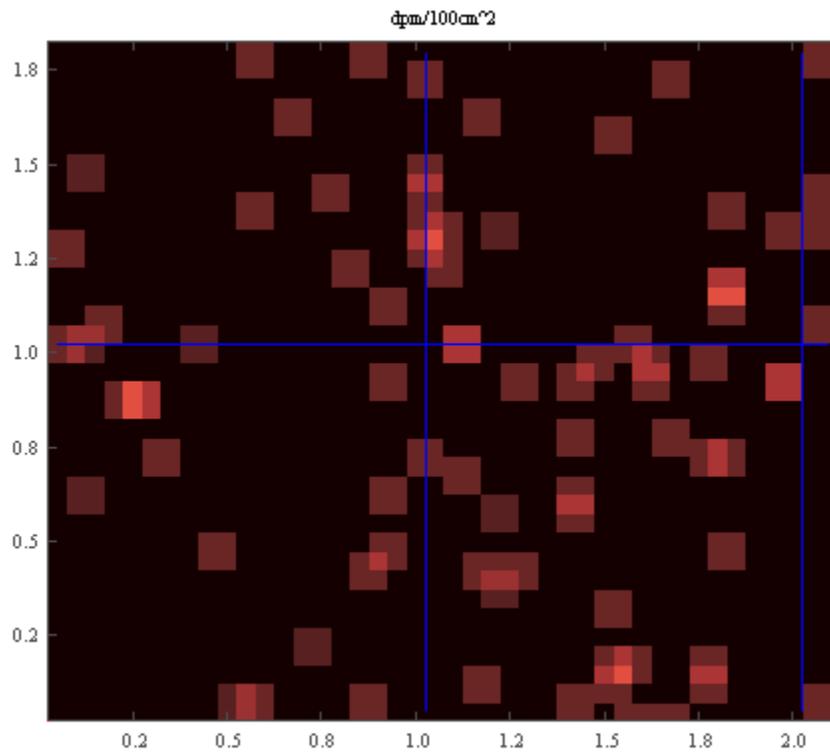


Figure 2: Meter Grid overlaid onto image plot of 100cm^2 areas..

Coincidence Logic:

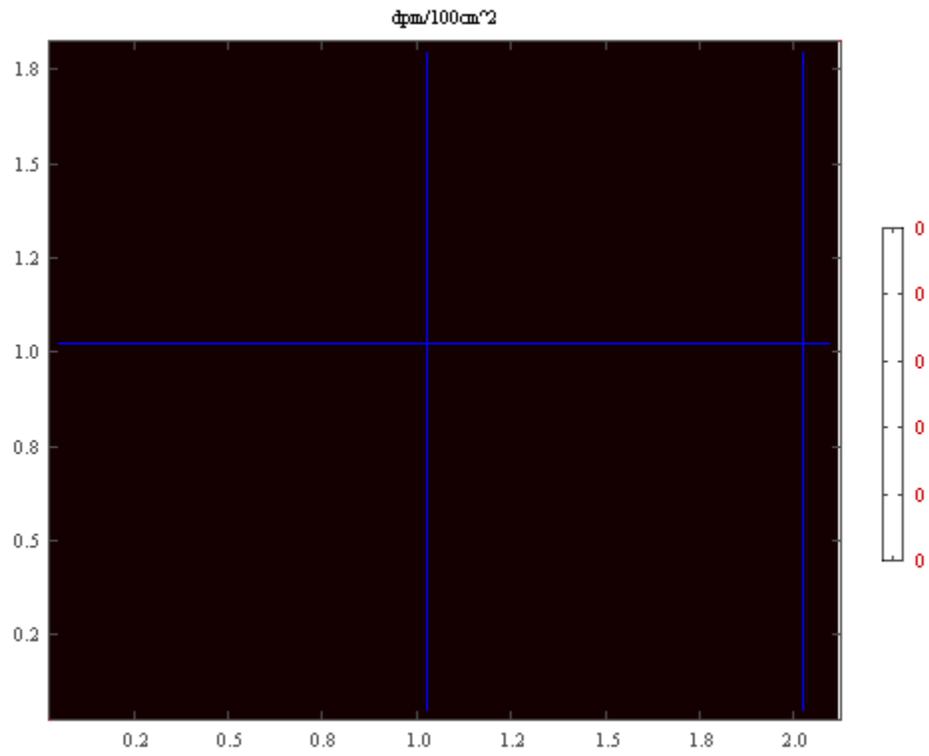


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3501A
Survey Date:	October 26, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

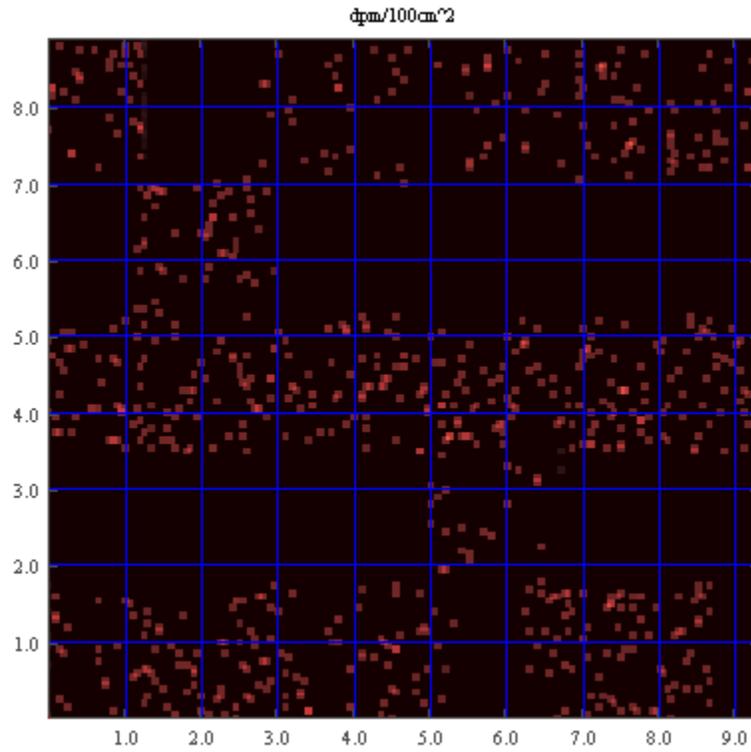


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

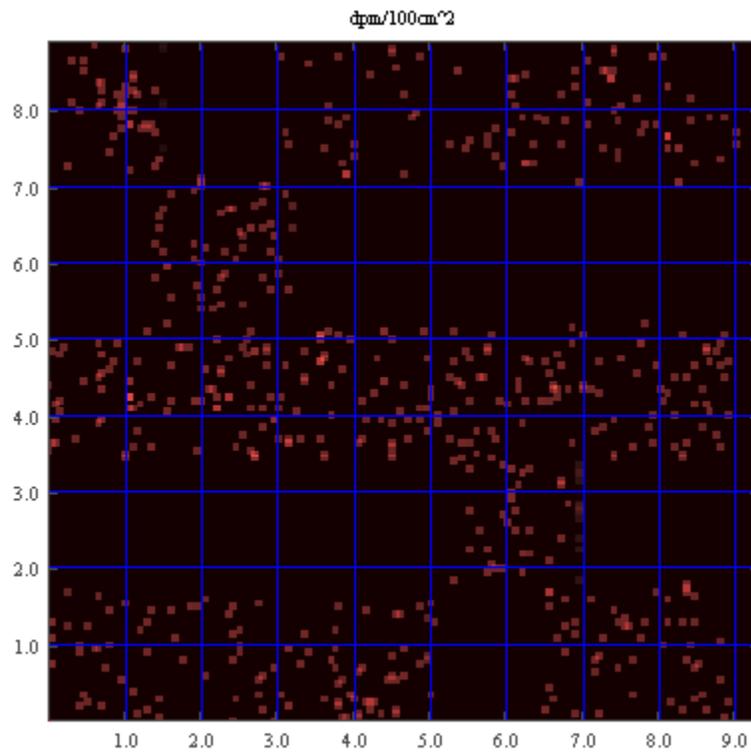


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

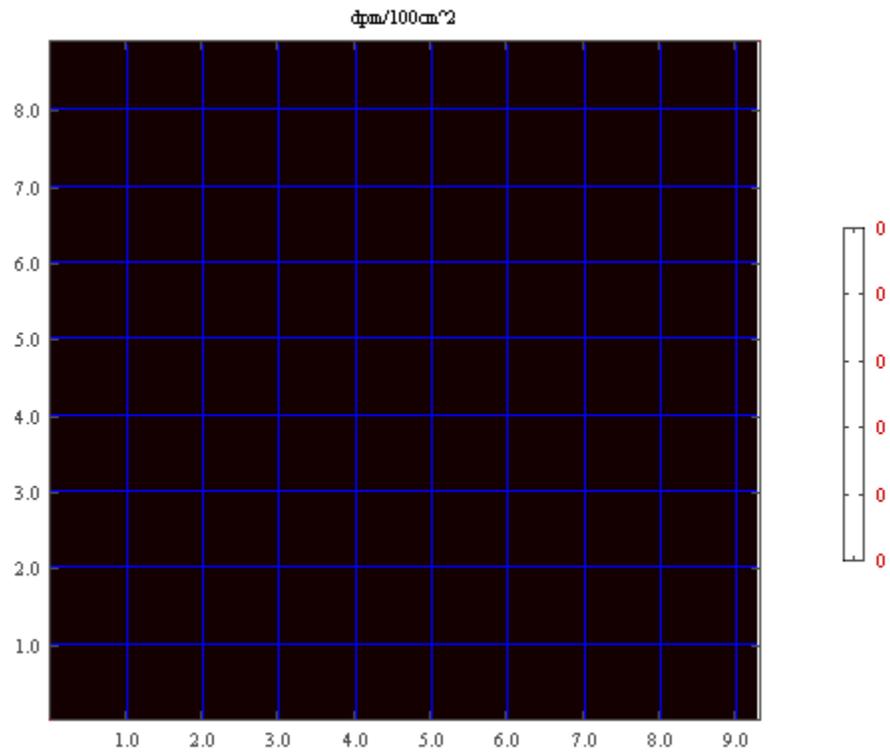


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3501Z
Survey Date:	December 29, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

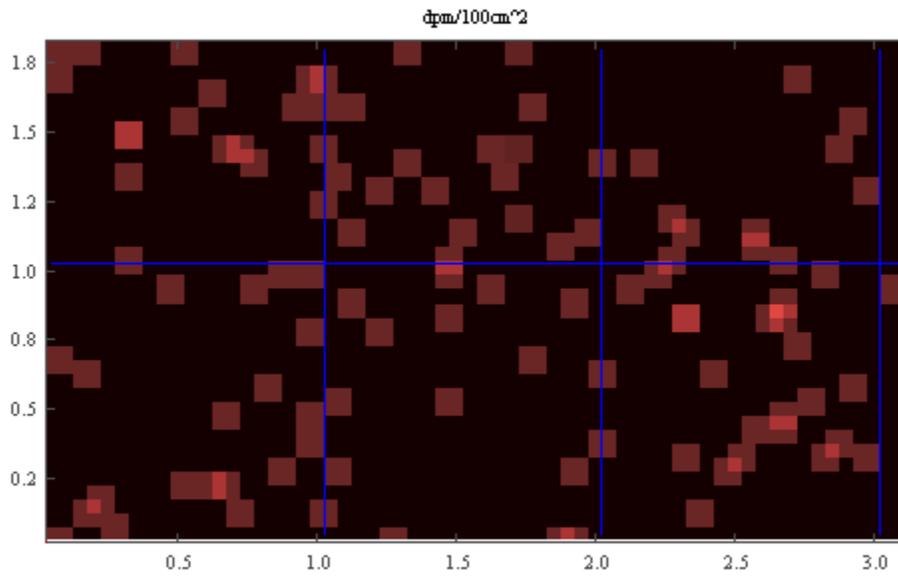


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

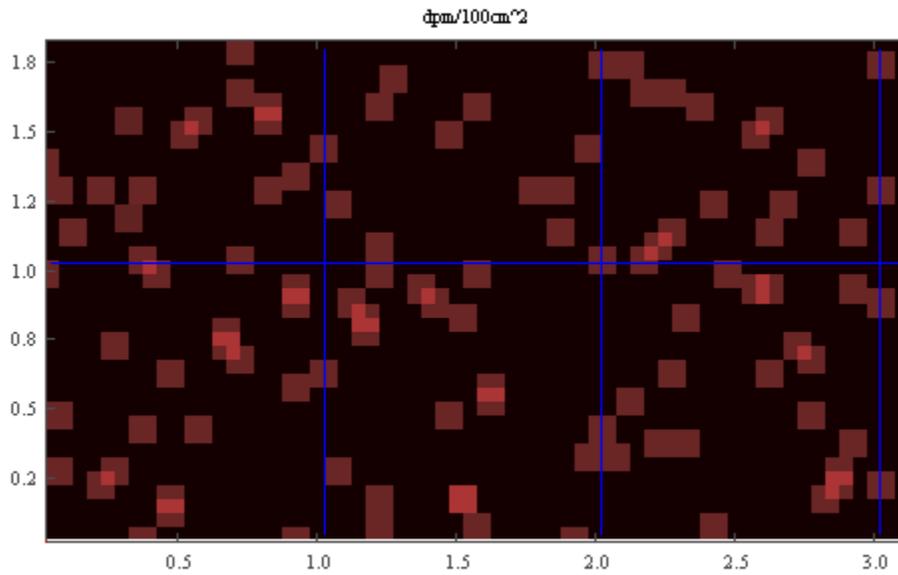


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA3511B
Survey Date:	October 27, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

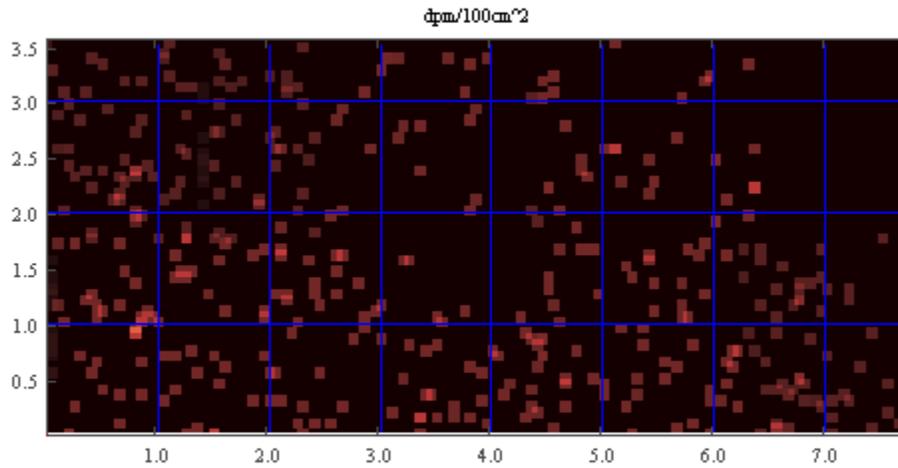


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

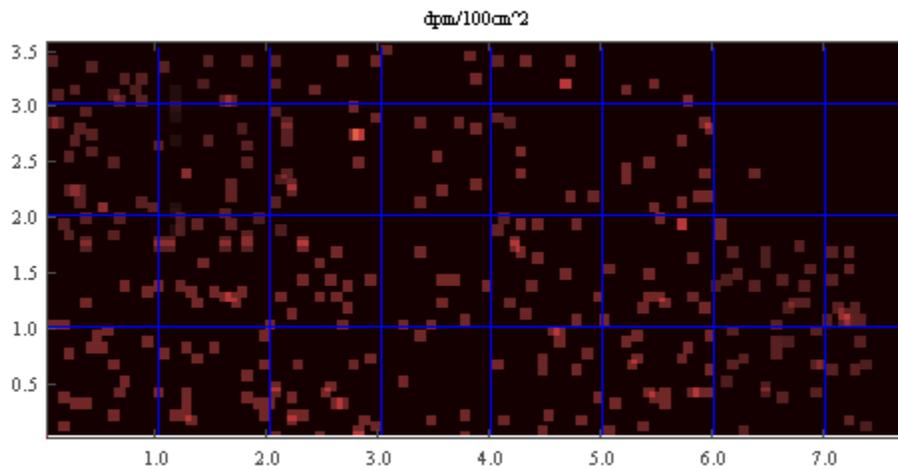


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

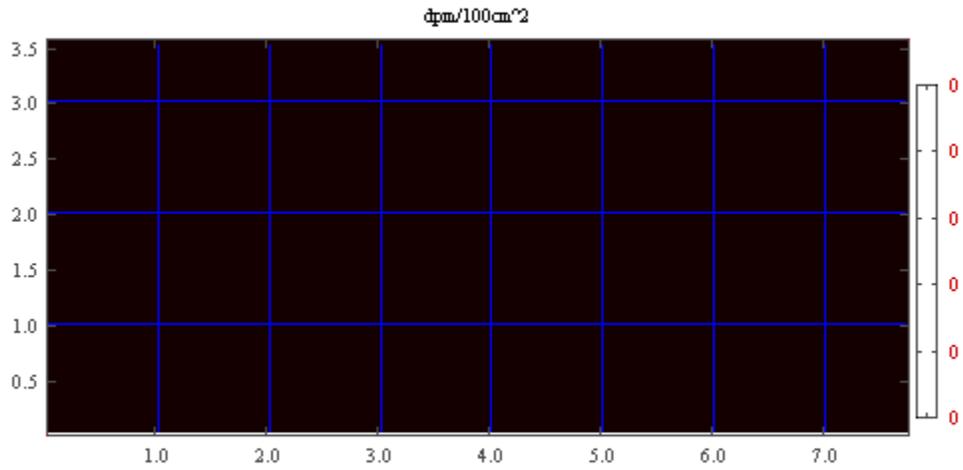


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3511Z
Survey Date:	December 29, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

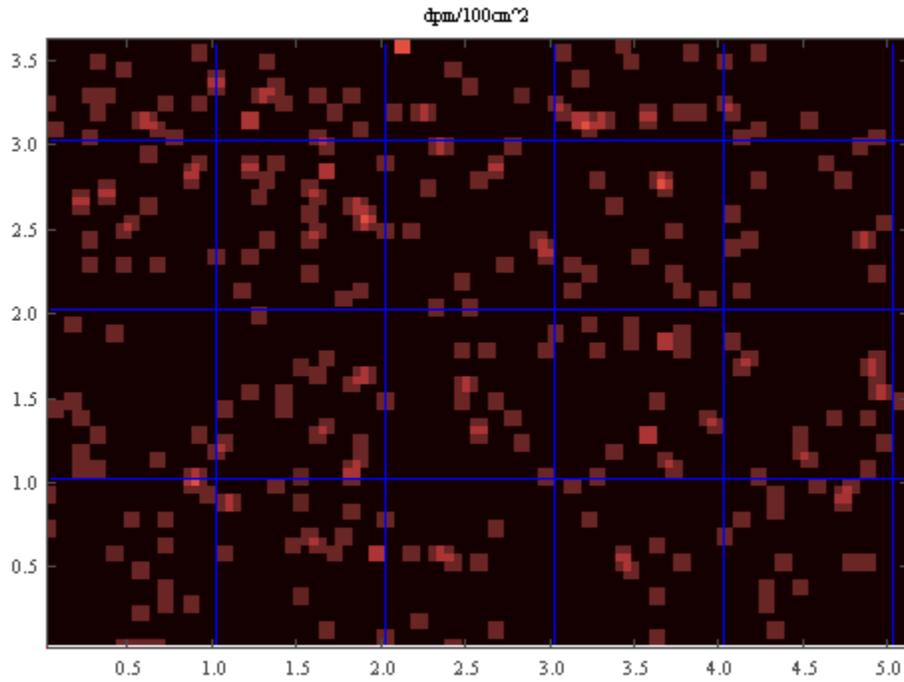


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

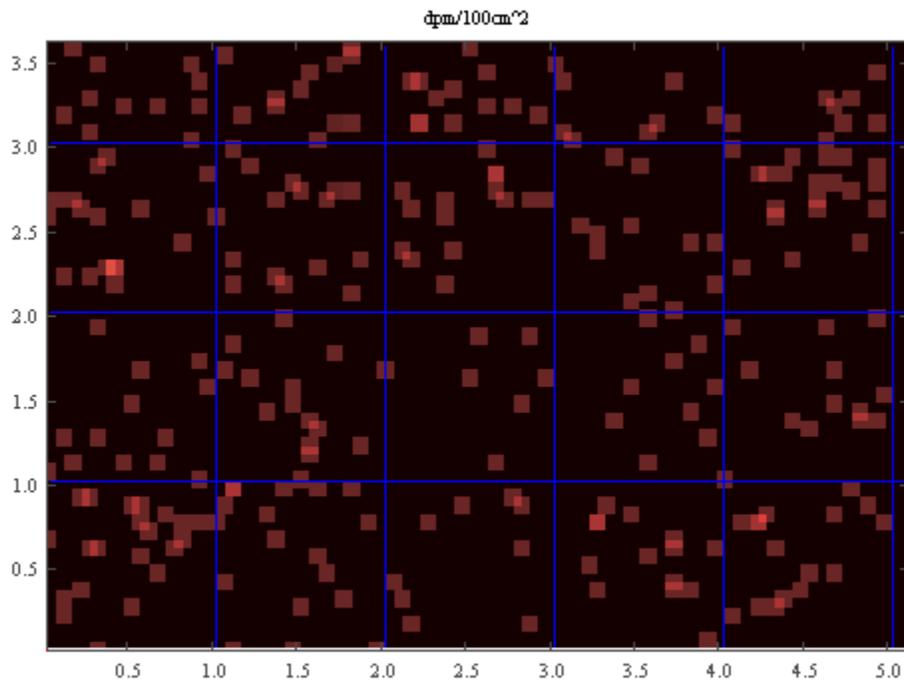


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

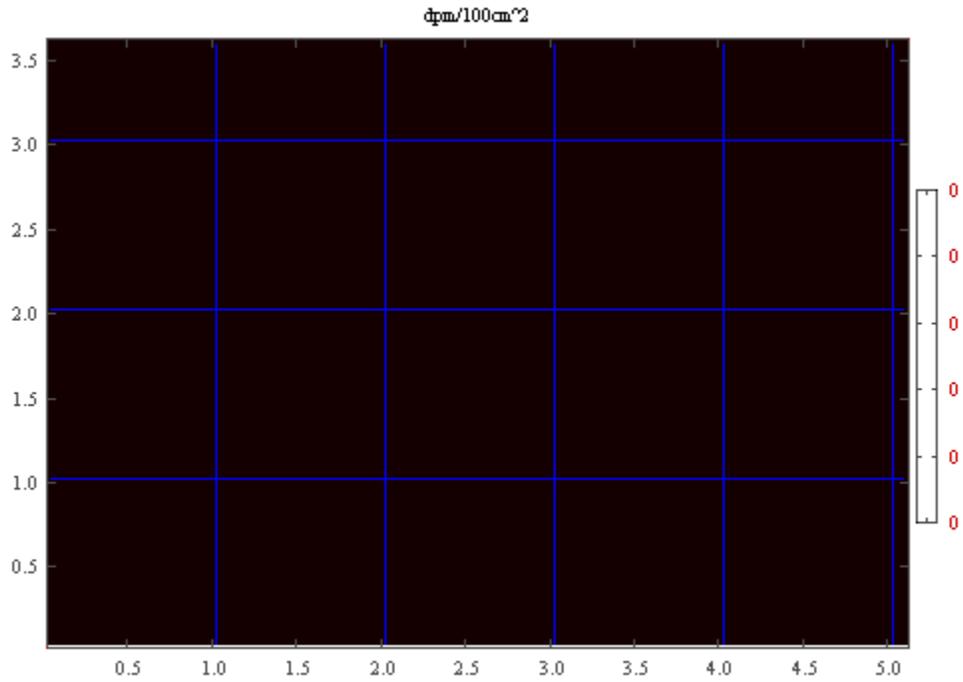


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3521A
Survey Date:	December 31, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

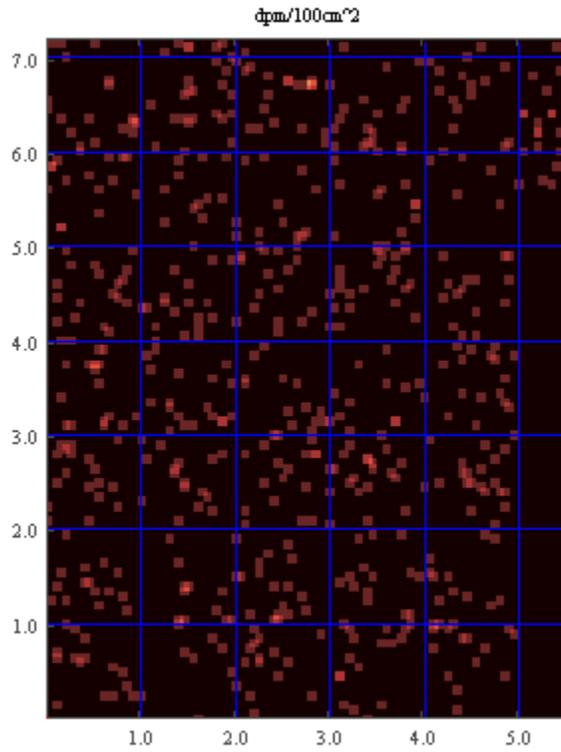


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

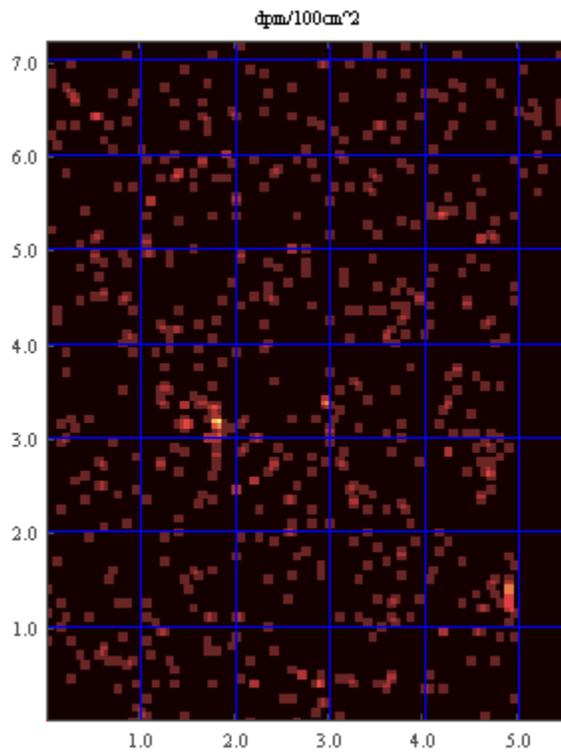


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

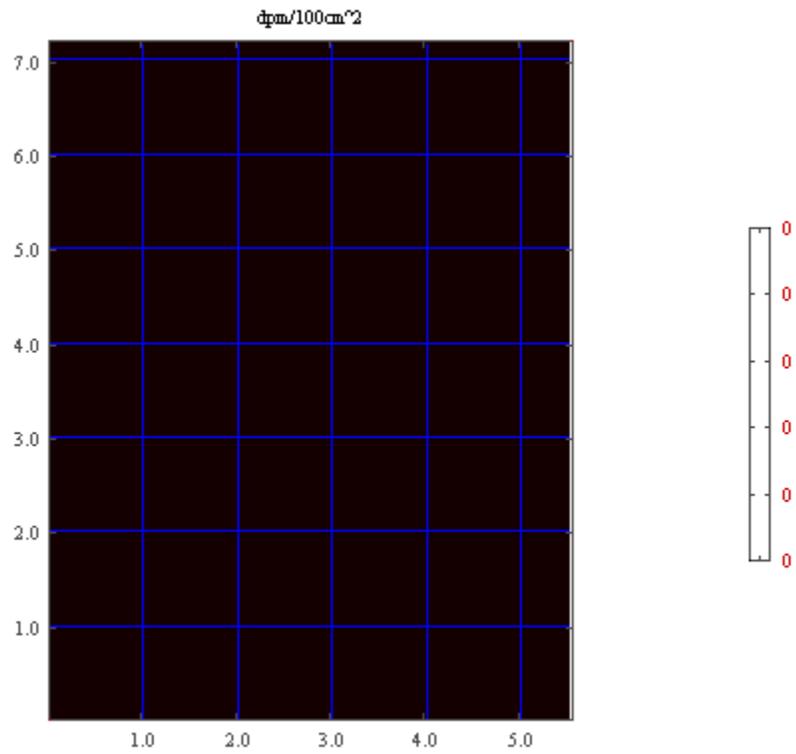


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3601A
Survey Date:	October 26, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

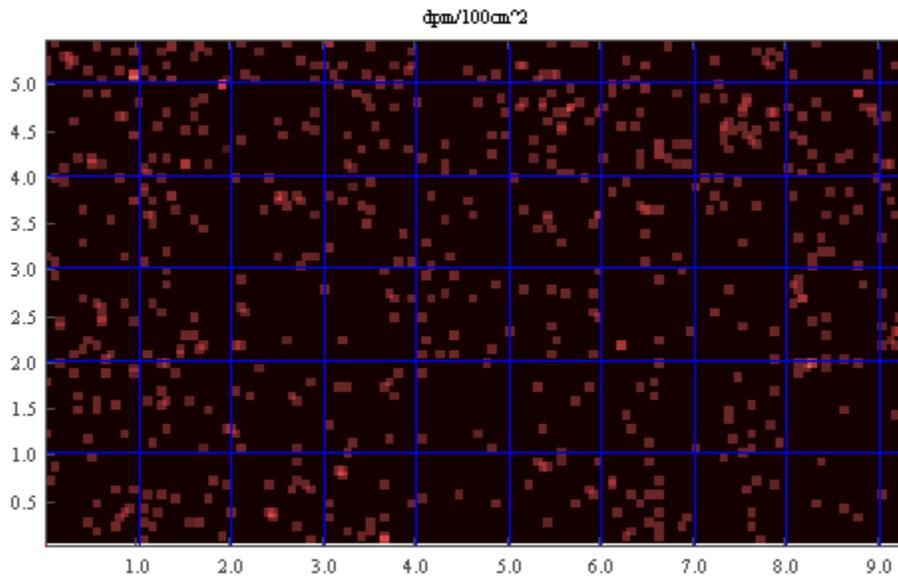


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

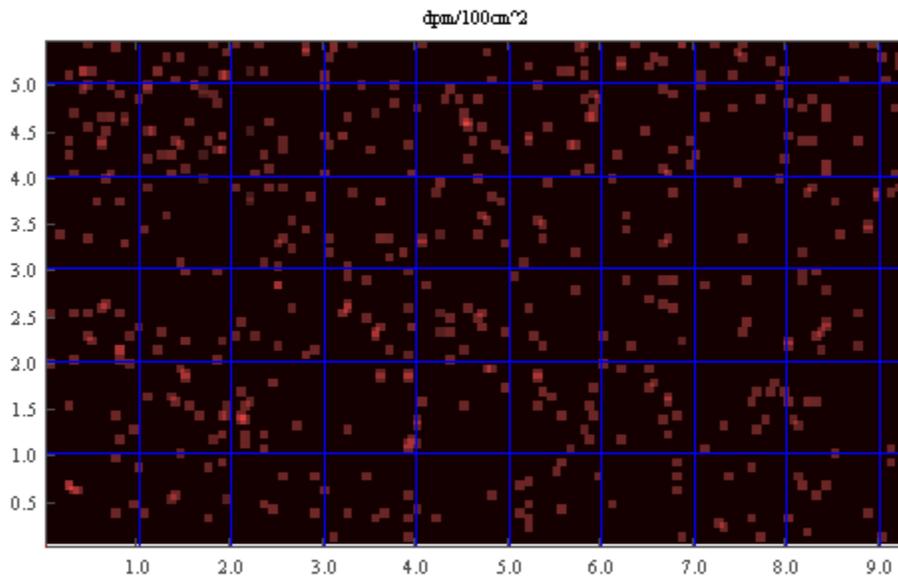


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

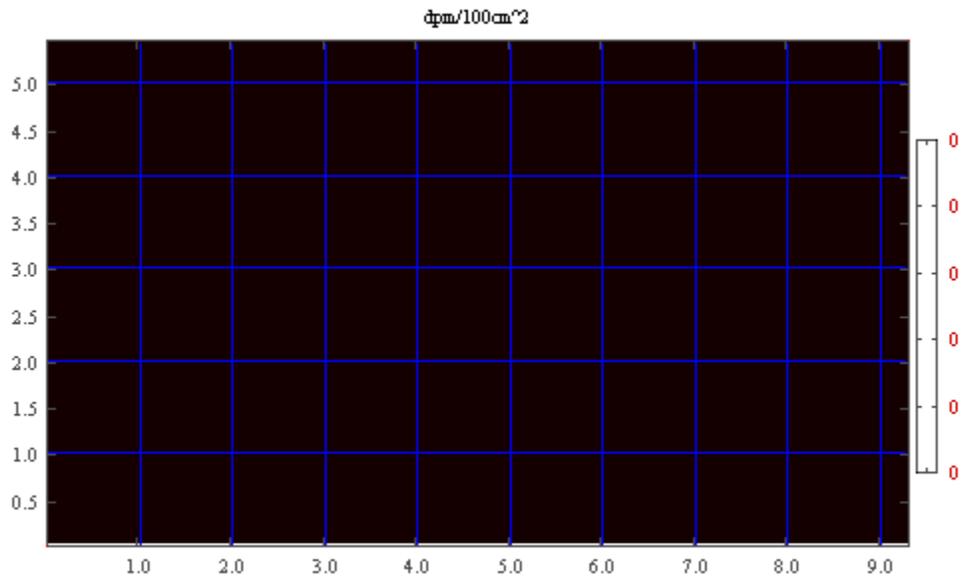


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3601B
Survey Date:	January 6, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

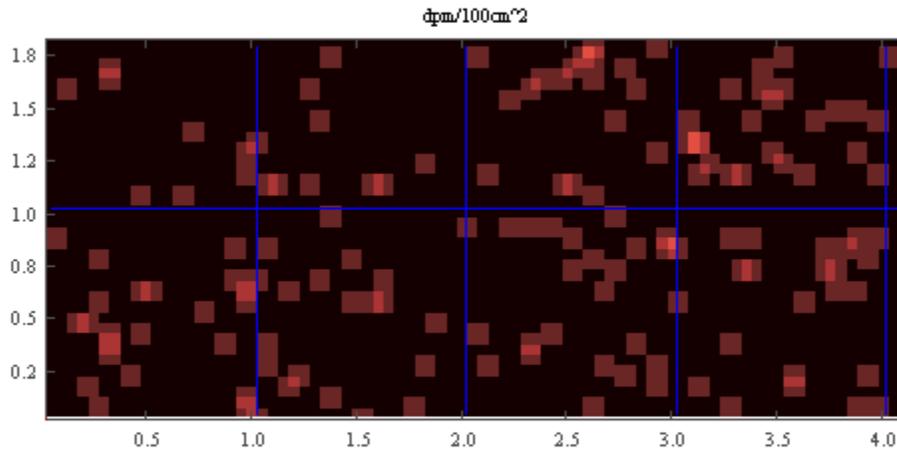


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

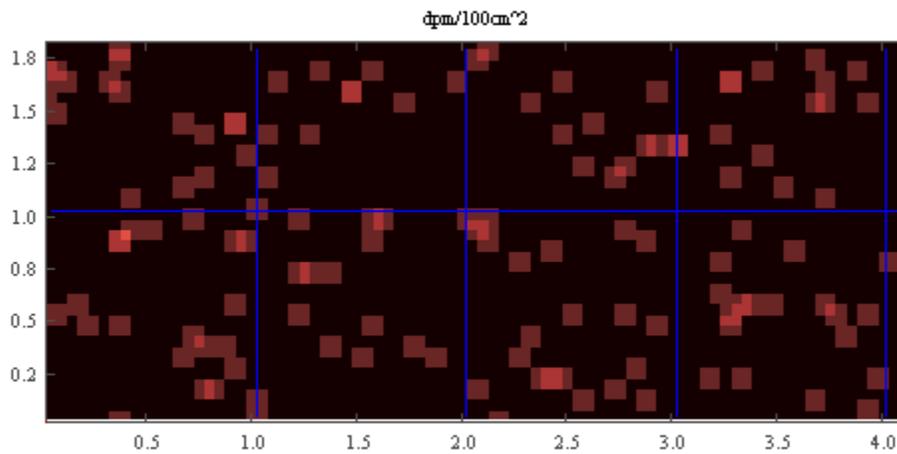


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

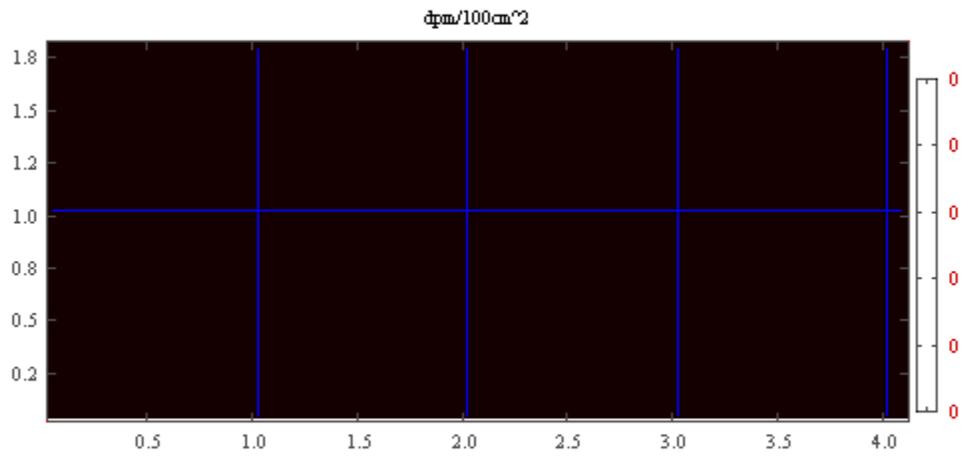


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3611A
Survey Date:	October 27, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

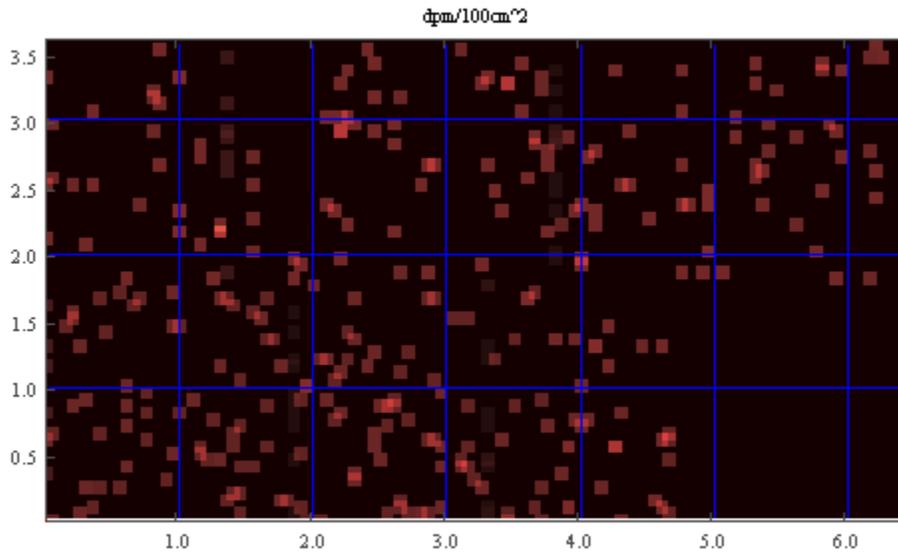


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

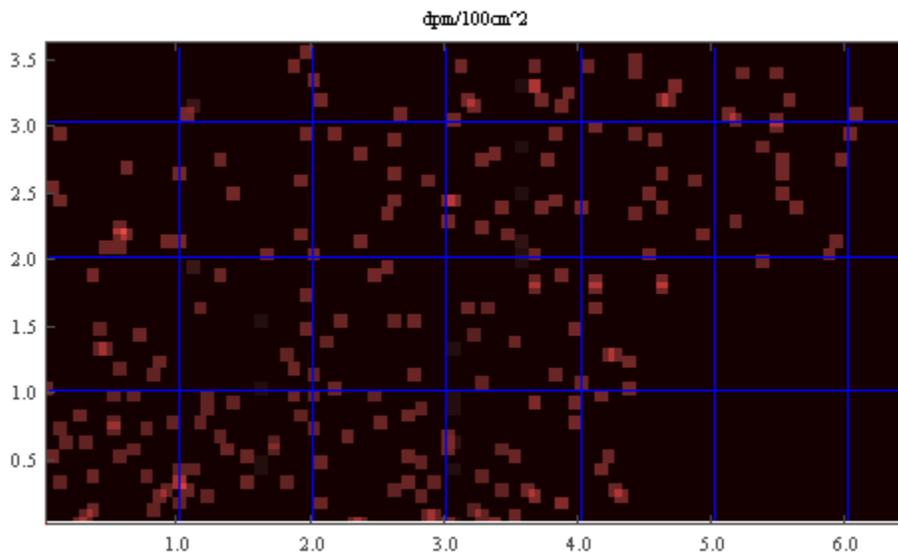


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

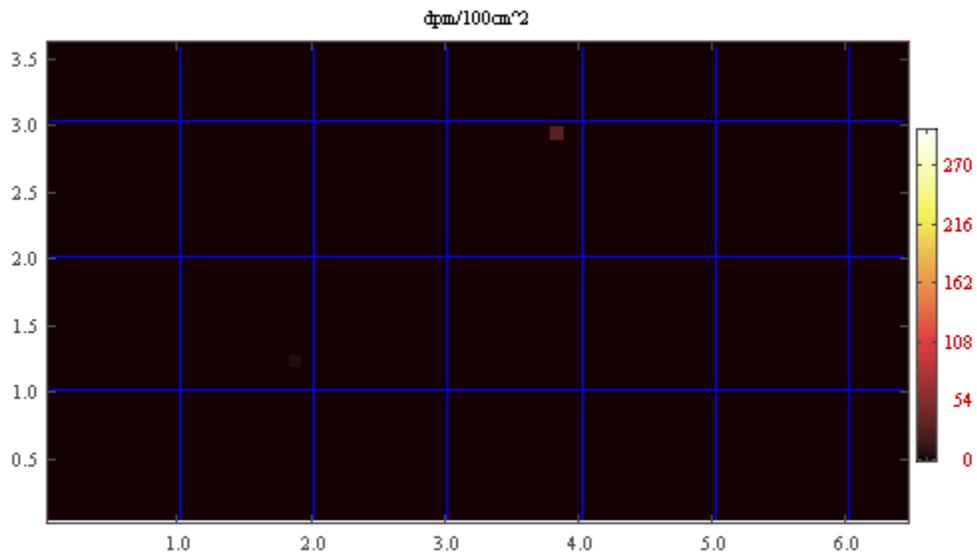


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3611Z
Survey Date:	December 29, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

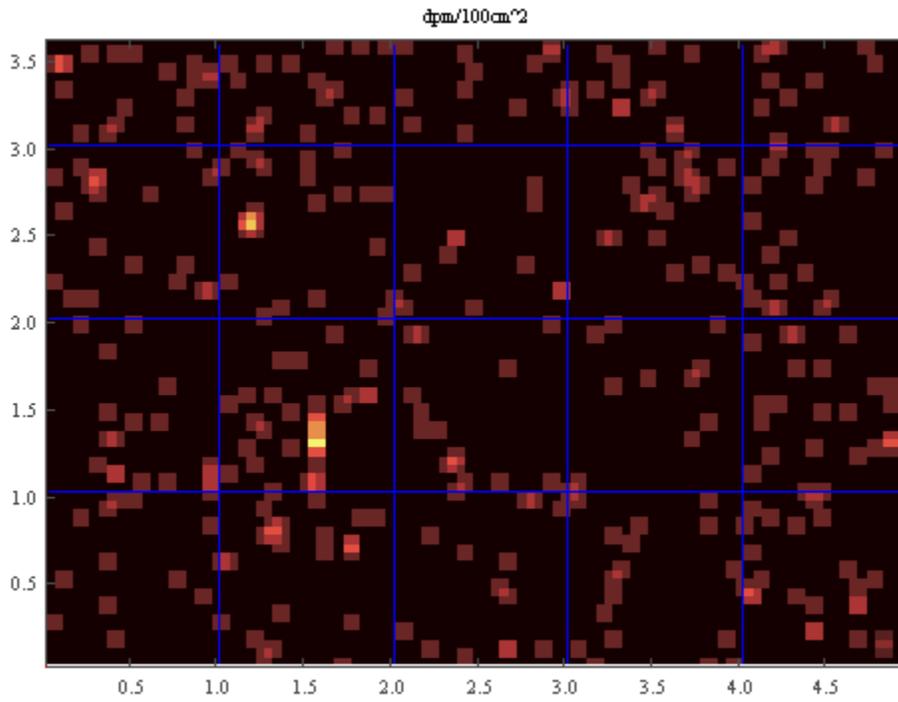


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

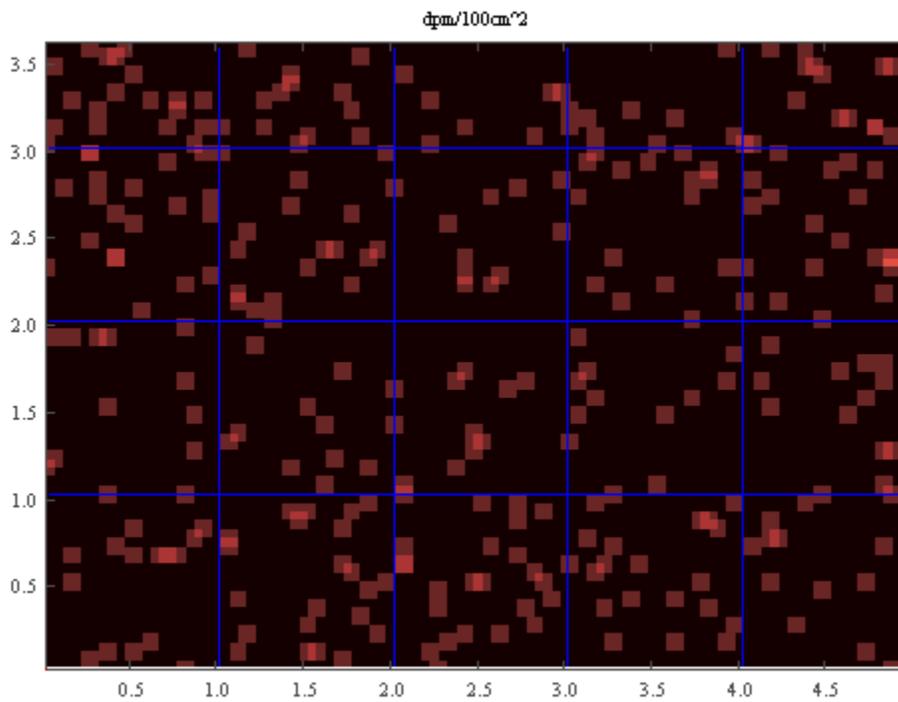


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

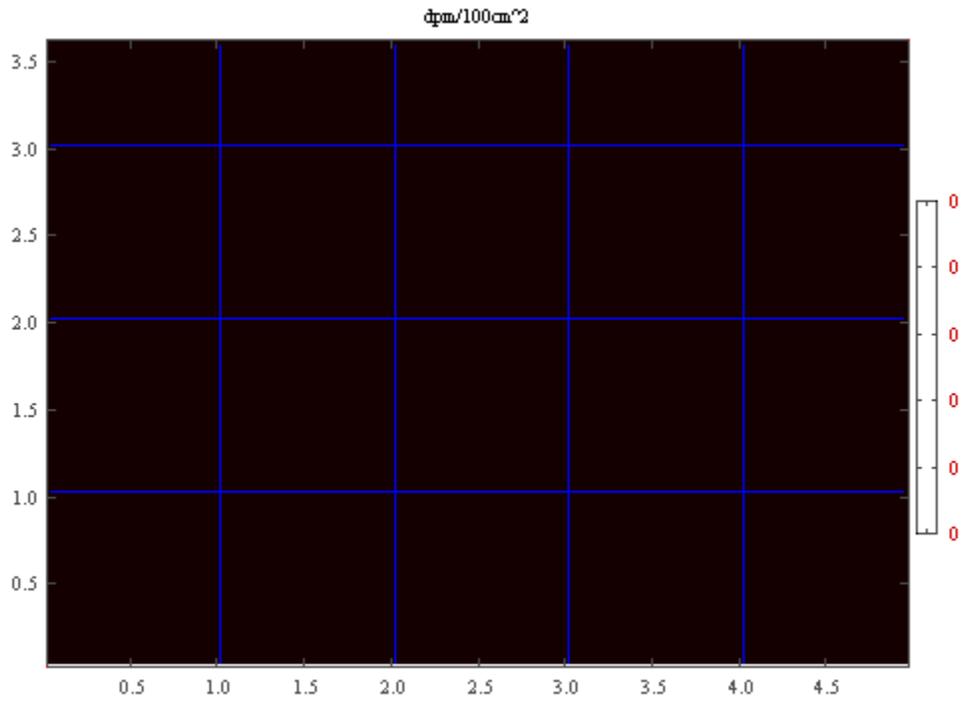


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3621A
Survey Date:	December 29, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

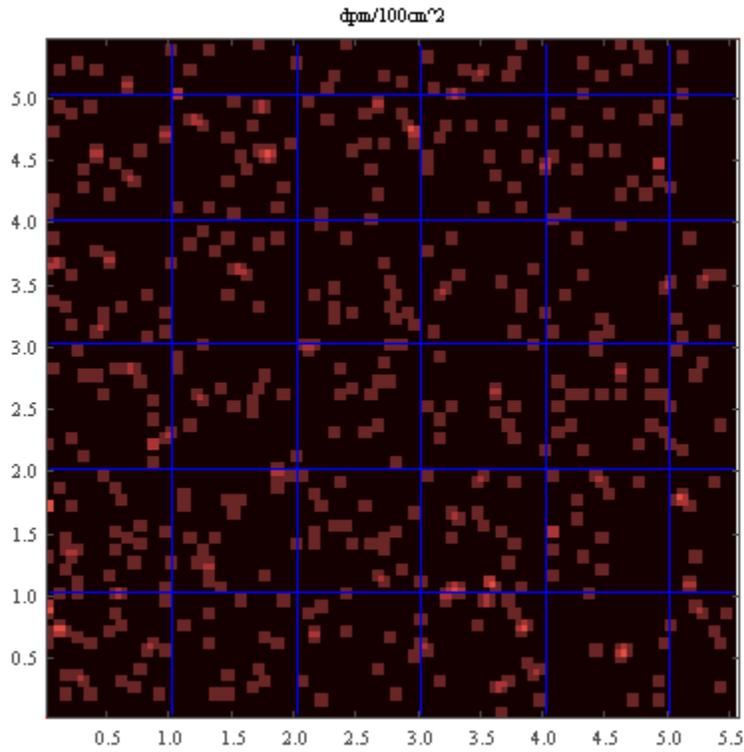


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

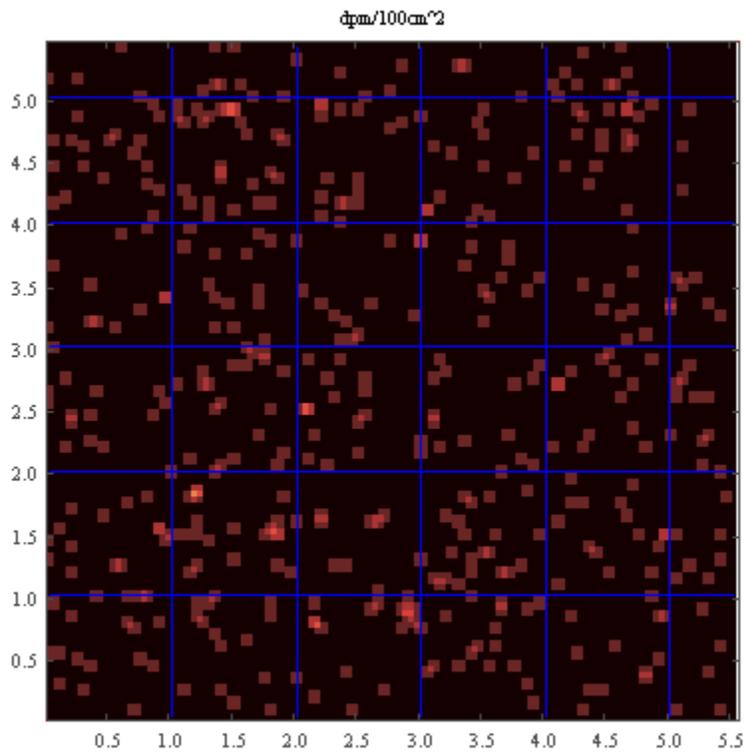


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

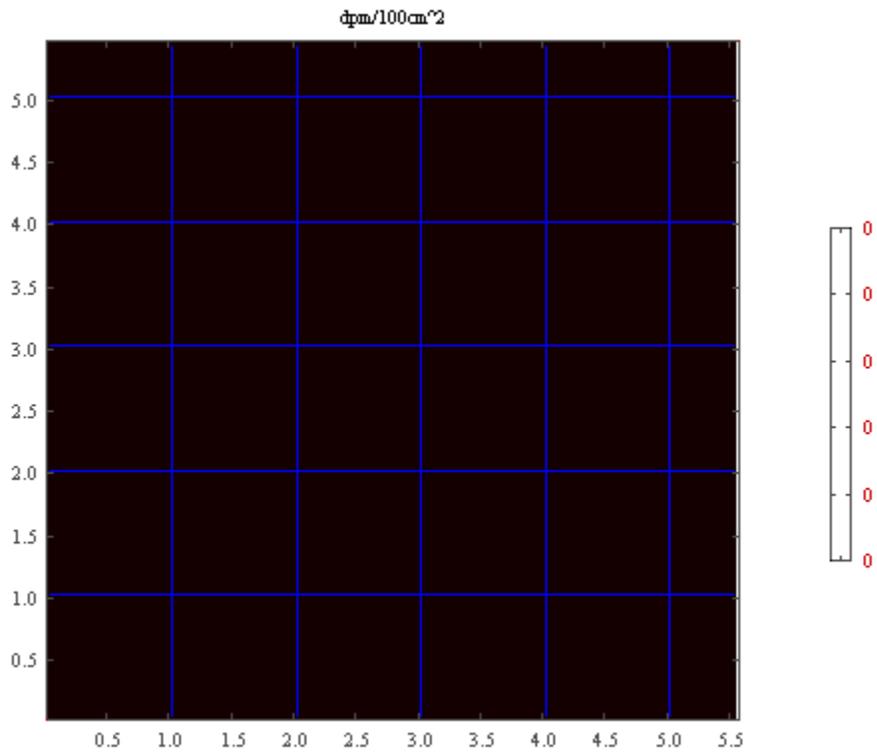


Figure 3: Meter Grid overlaid onto image plot of 100cm^2 areas. The color scale is in $\text{dpm per } 100\text{cm}^2$.

Survey Report

Survey File Name:	FA3701A
Survey Date:	October 26, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

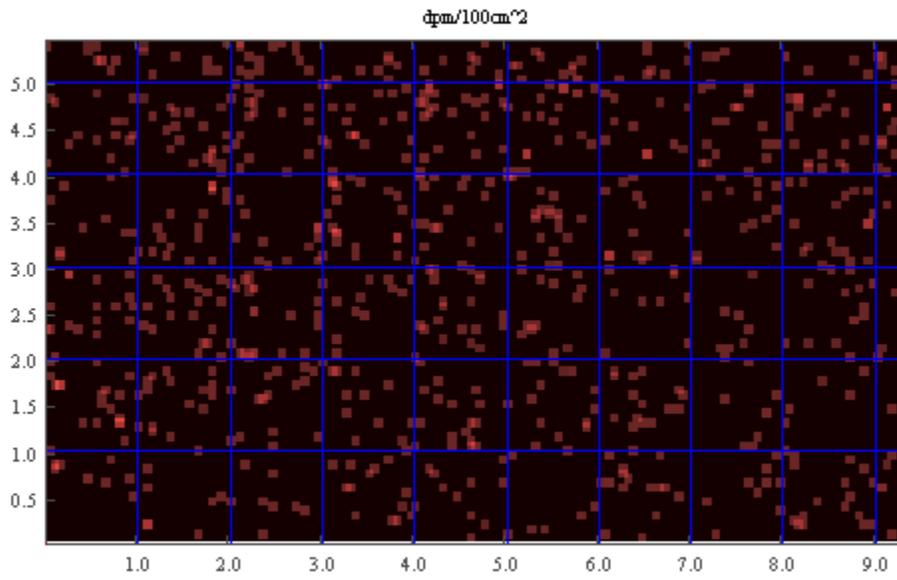


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

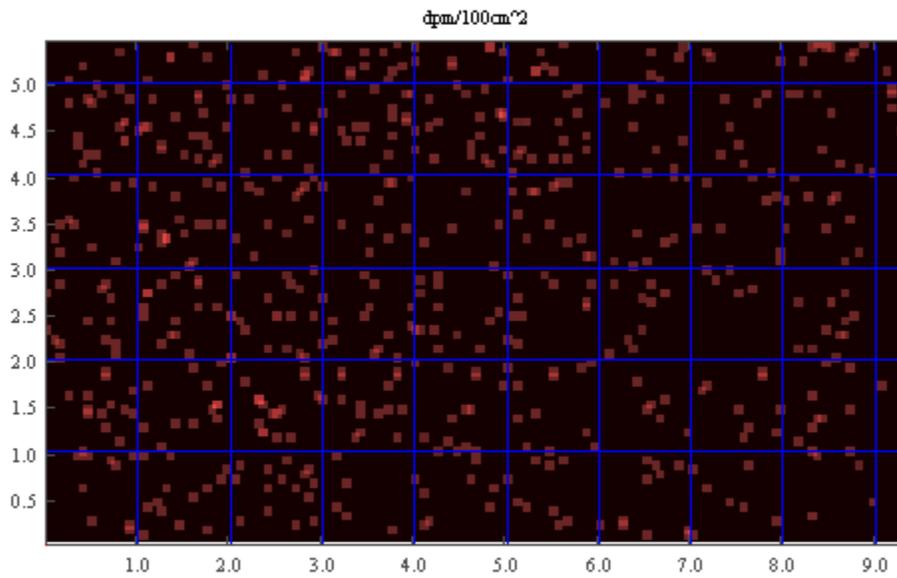


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

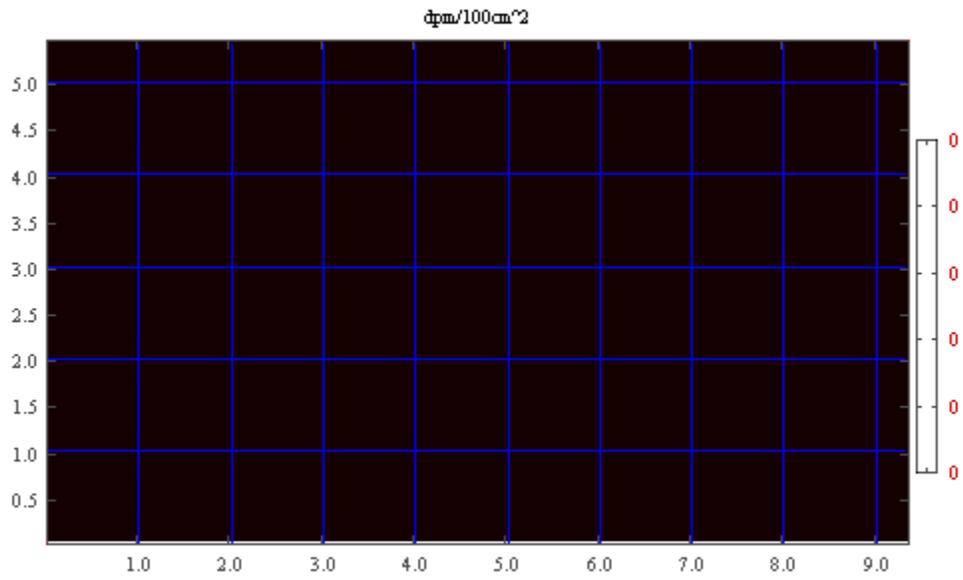


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3701B
Survey Date:	January 11, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	254 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

This survey is not position correlated.

Primary Detector:

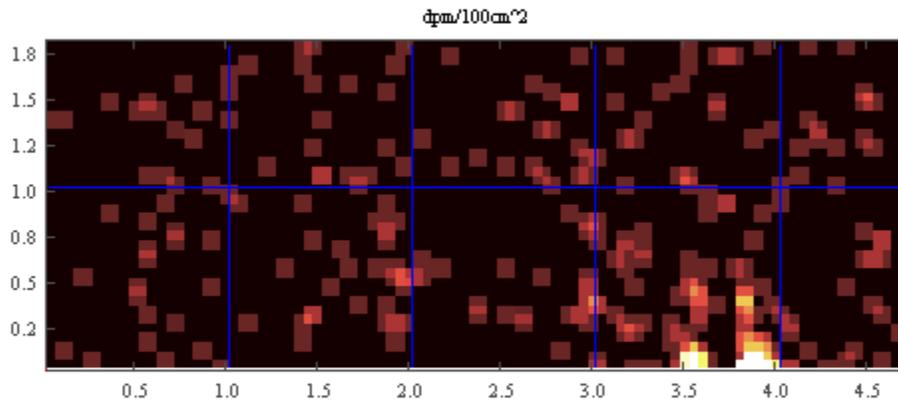


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

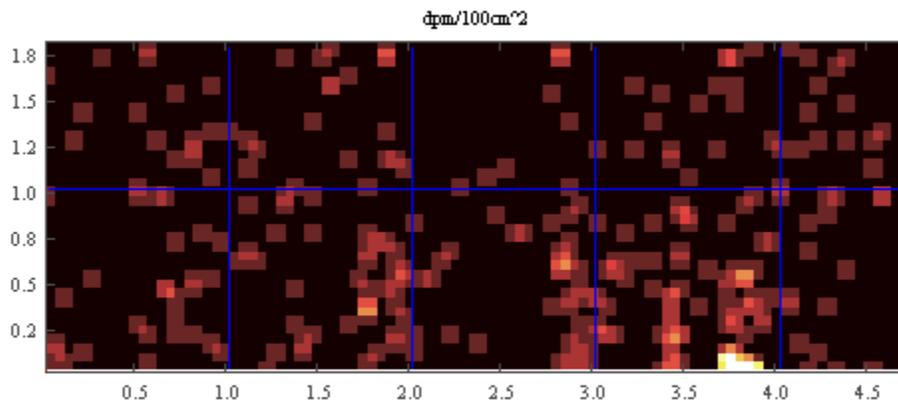


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

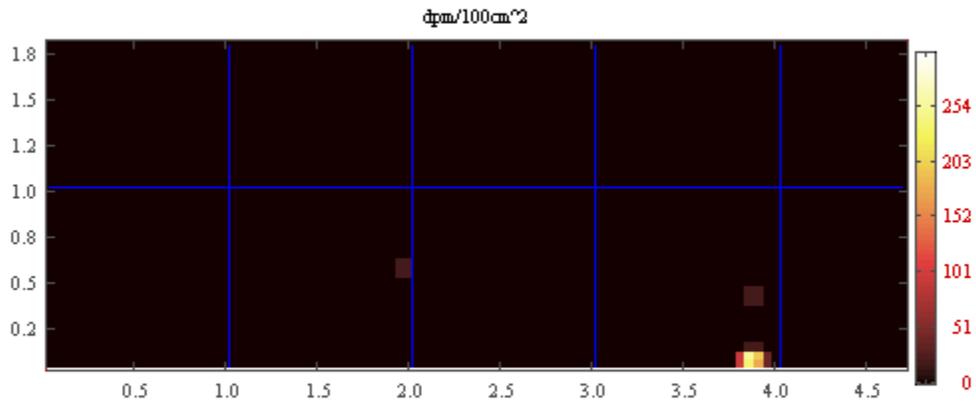


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

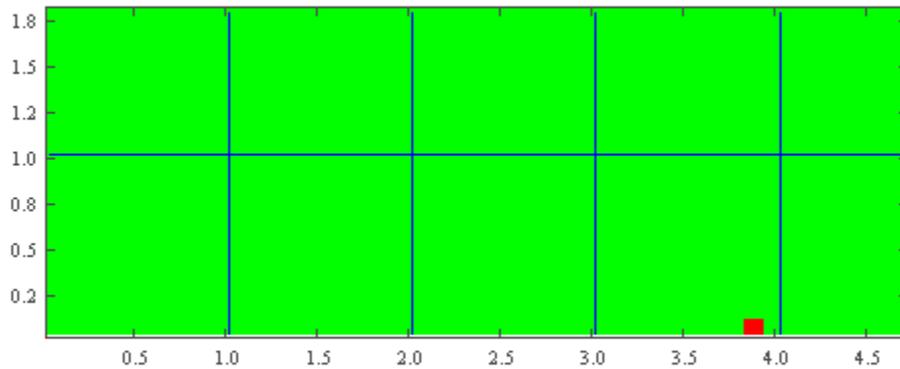


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	254	77	(385,10)	(0,5)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA3711A
Survey Date:	October 27, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

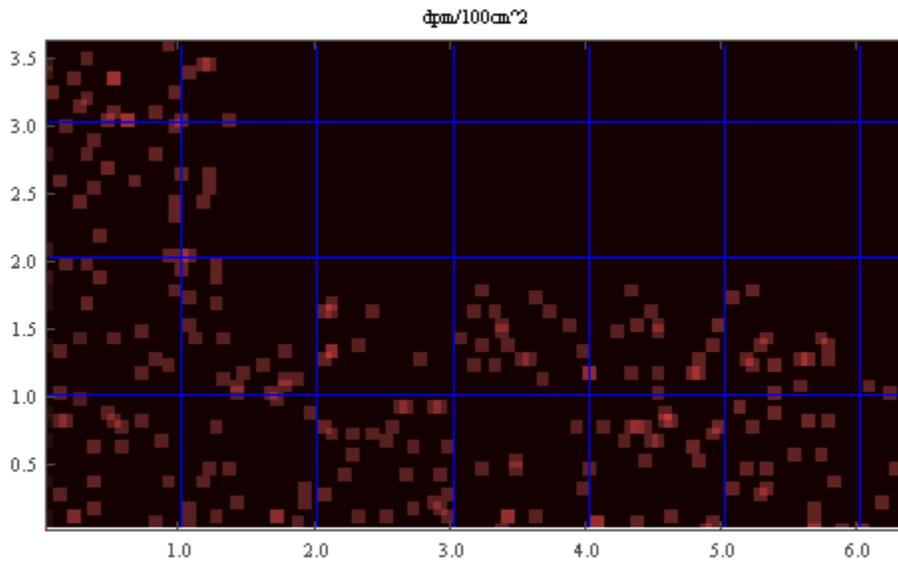


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

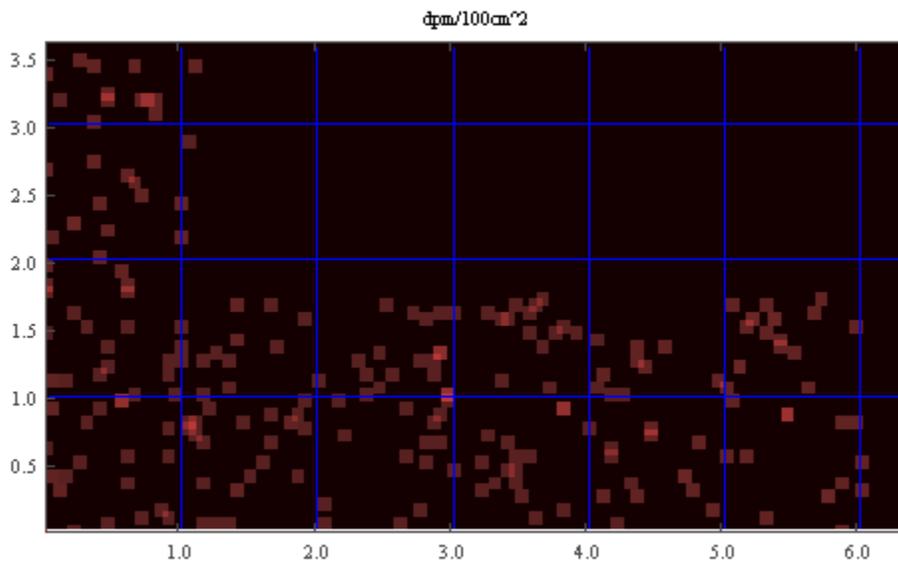


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

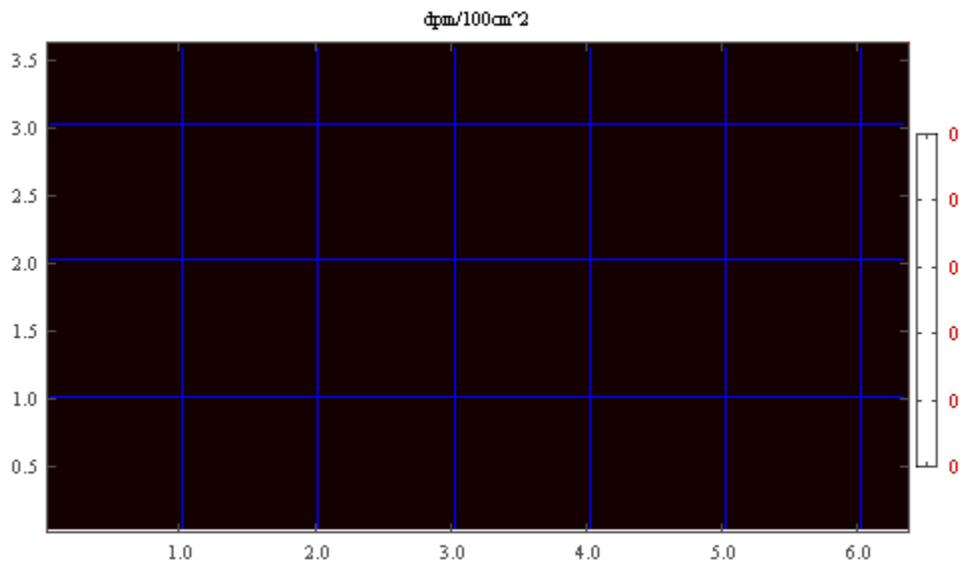


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3711B
Survey Date:	January 7, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

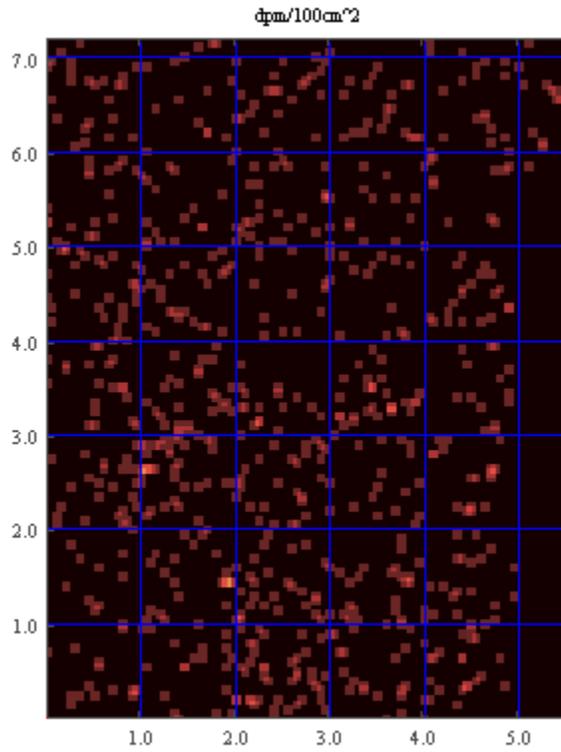


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

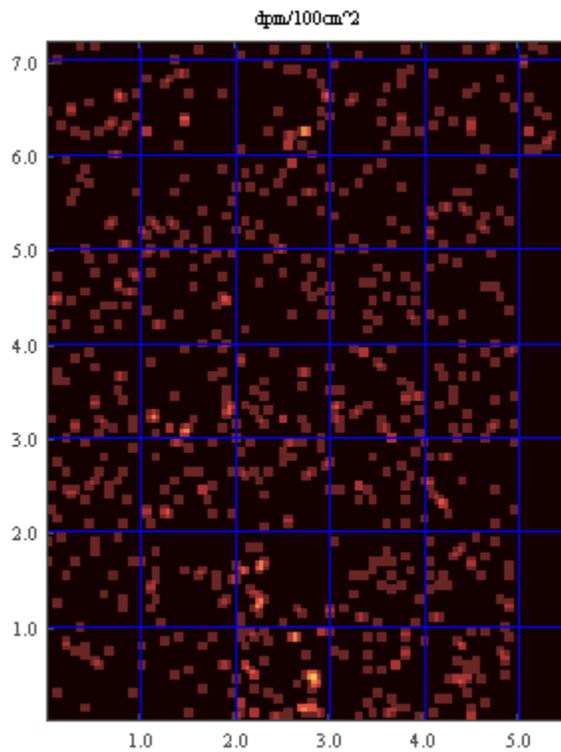


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

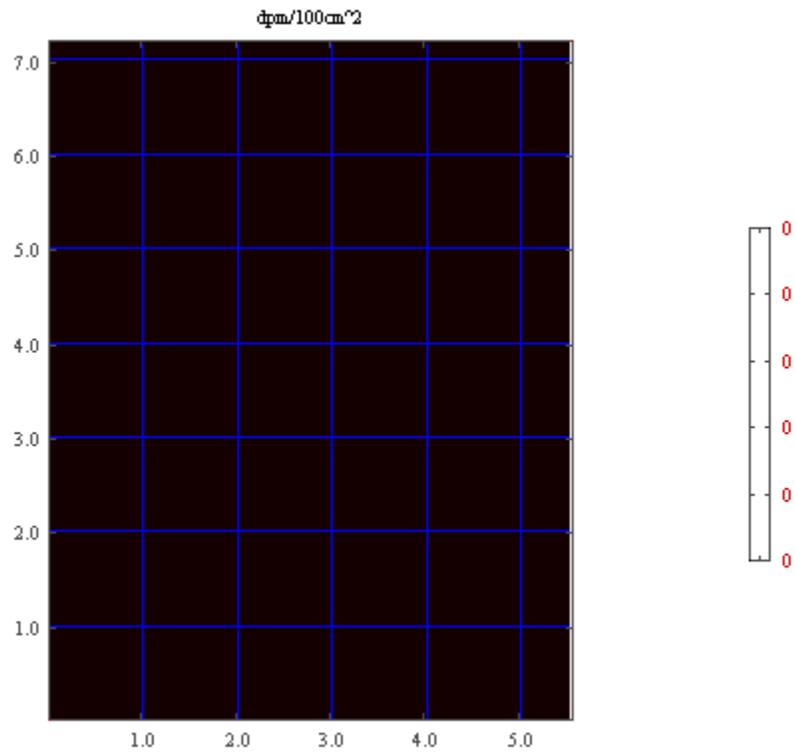


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3721A
Survey Date:	January 7, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

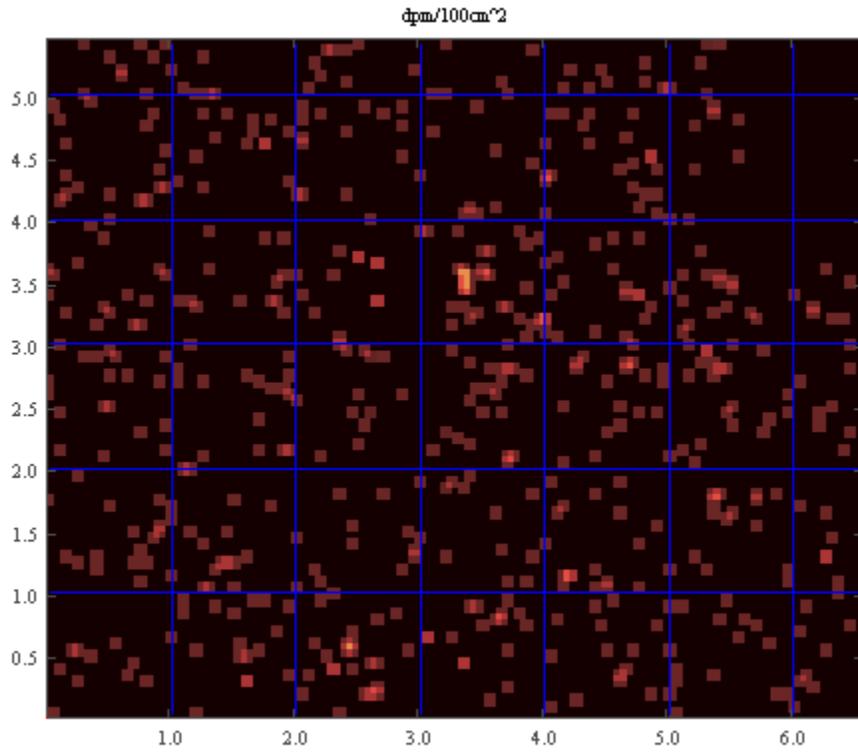


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

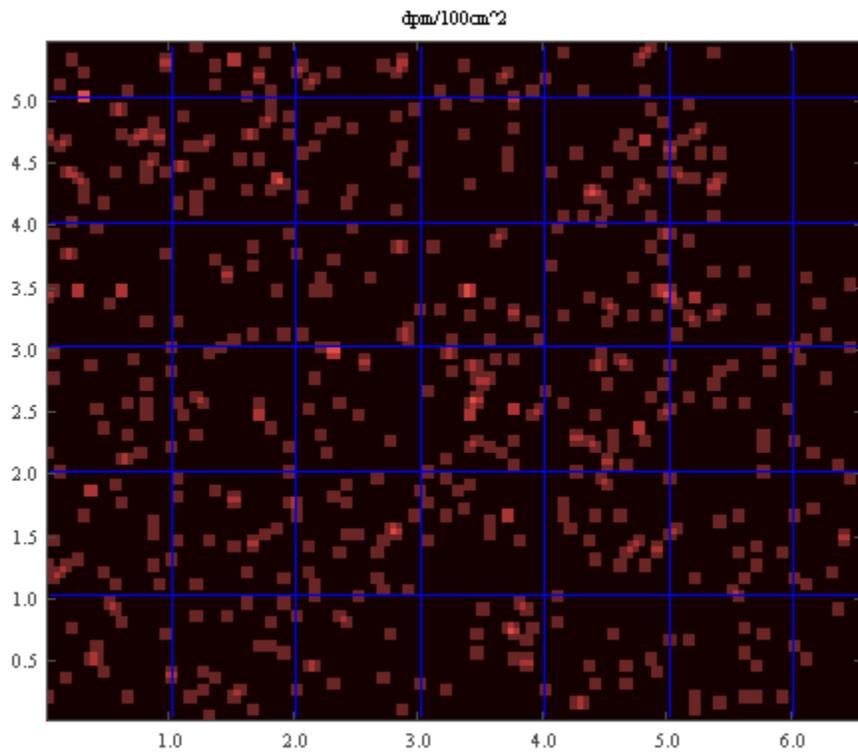


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

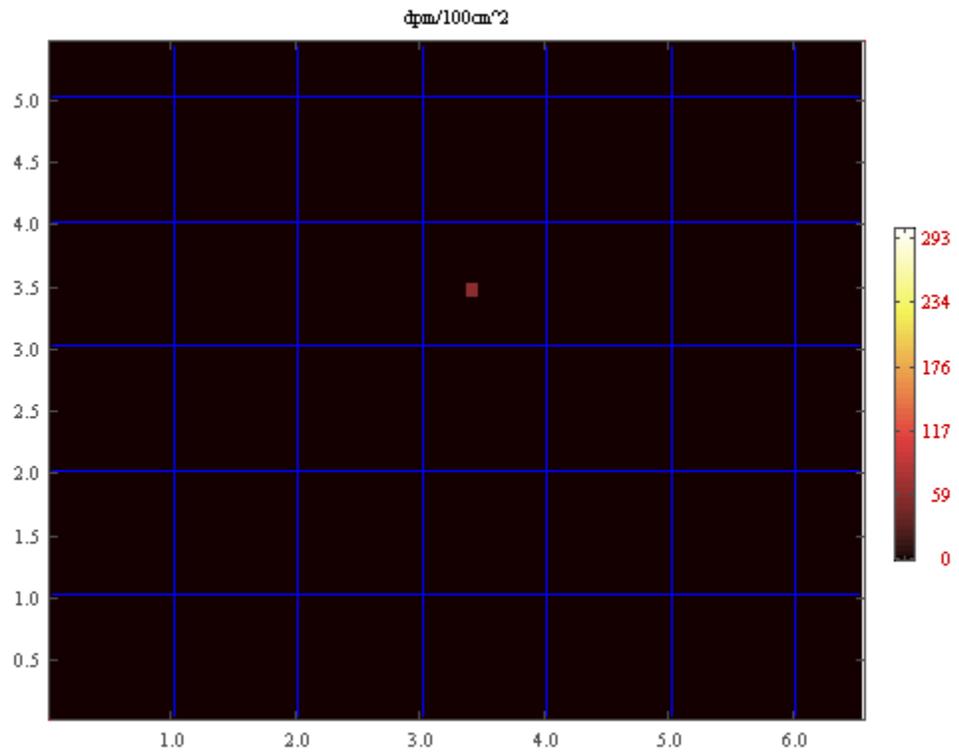


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3801A
Survey Date:	October 25, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

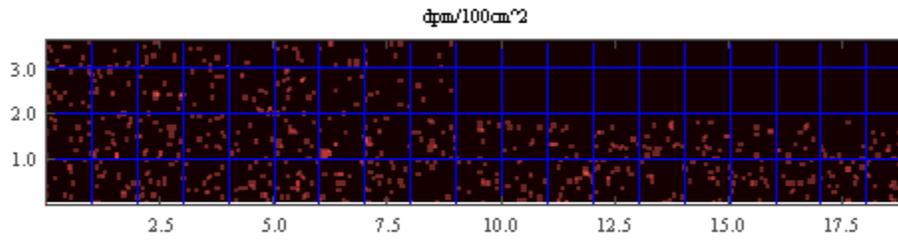


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

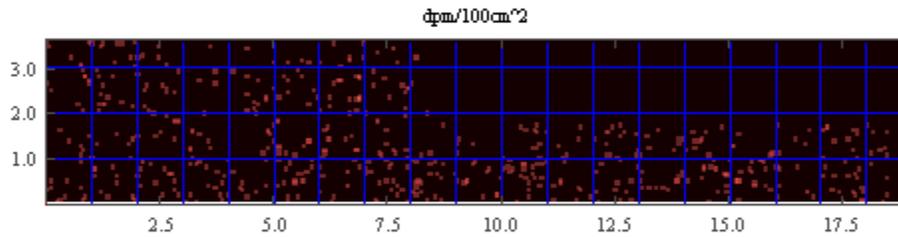


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

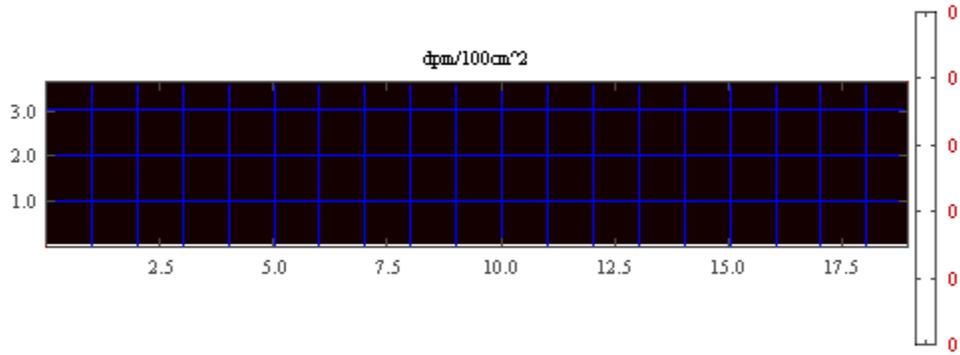


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3901B
Survey Date:	December 15, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

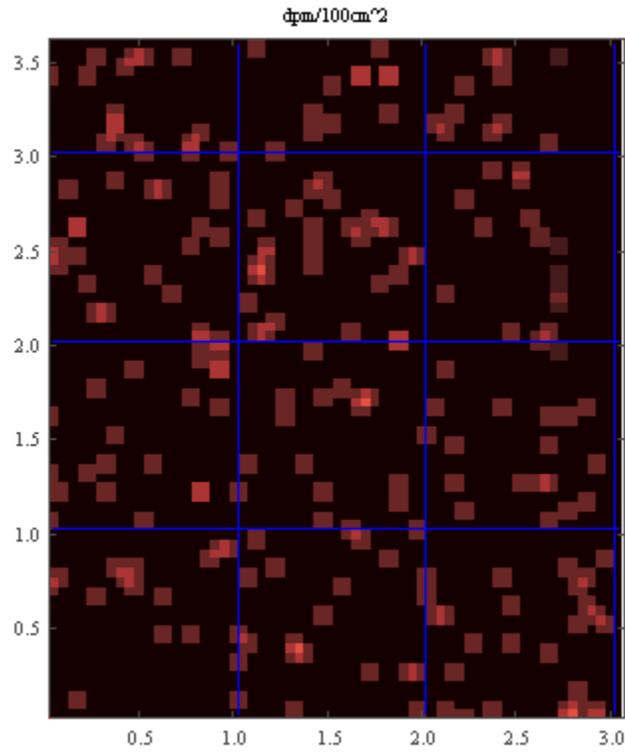


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

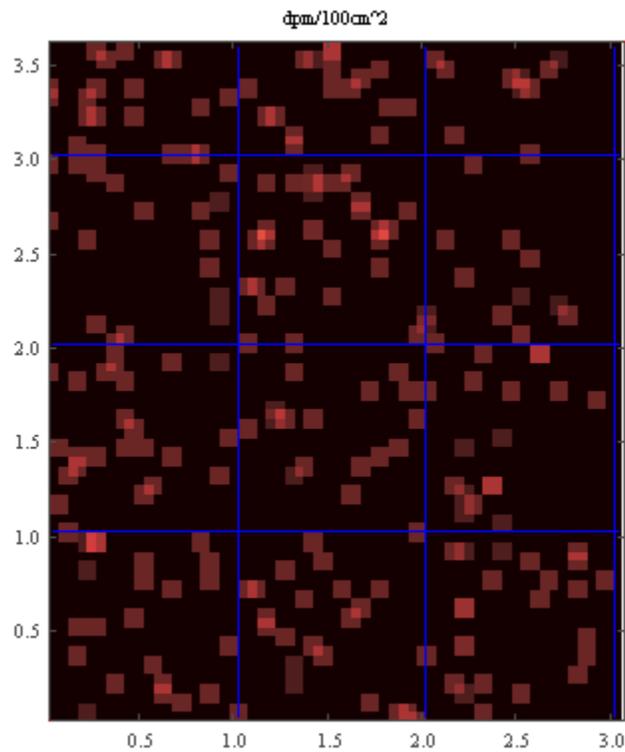


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

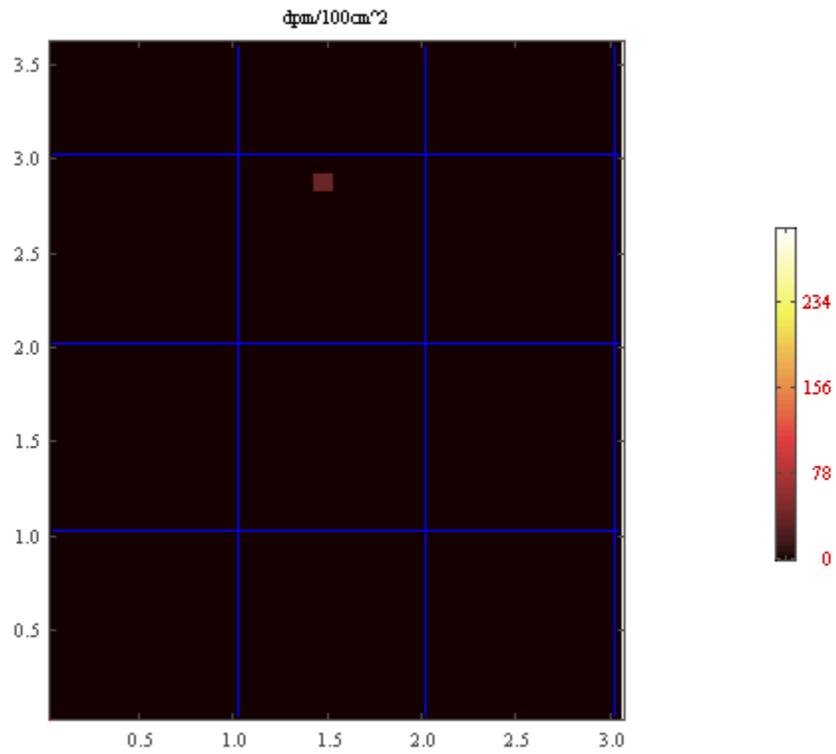


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3911A
Survey Date:	October 26, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

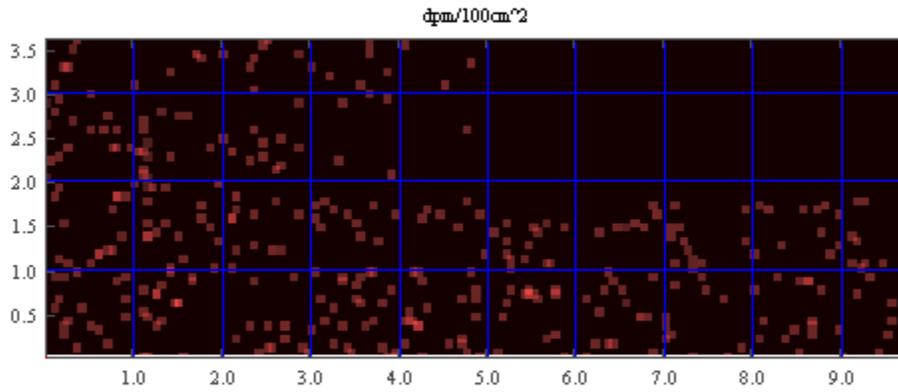


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

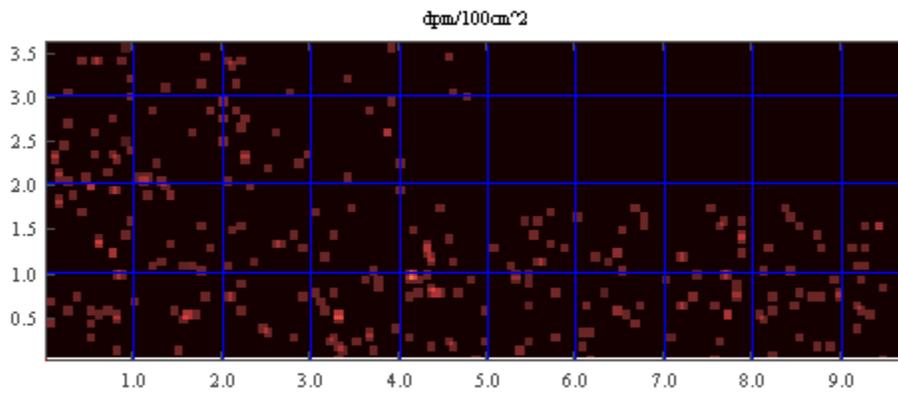


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

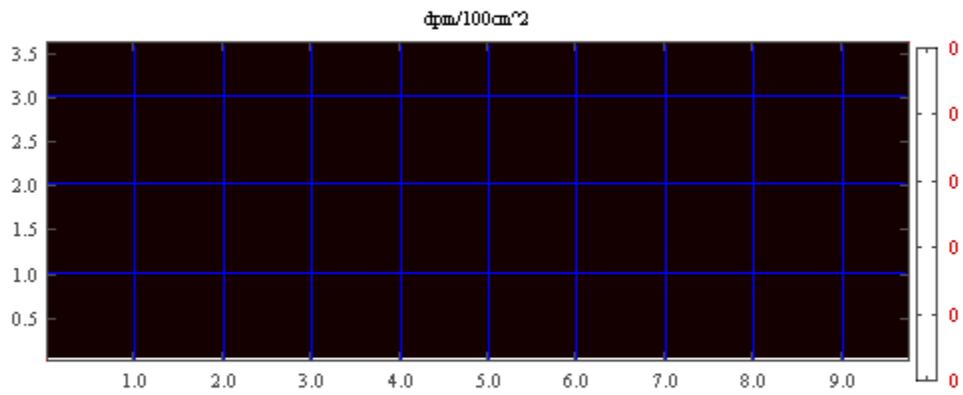


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3911B
Survey Date:	October 26, 2010
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

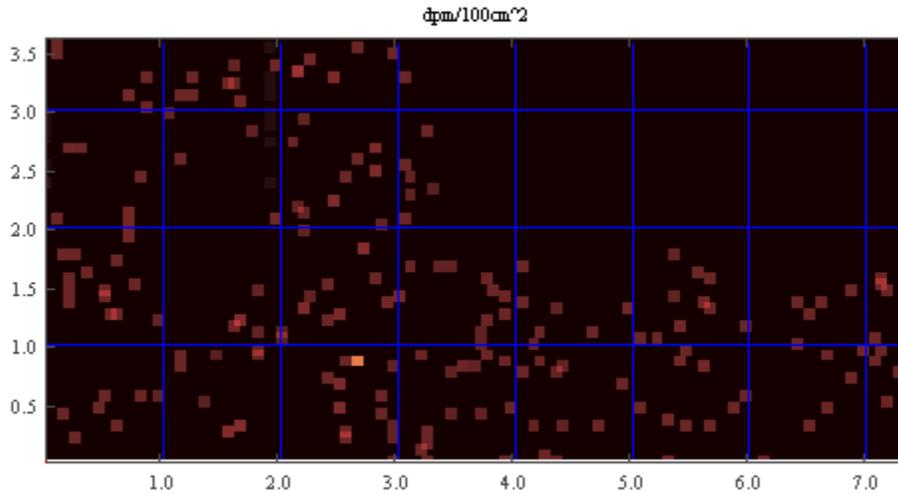


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

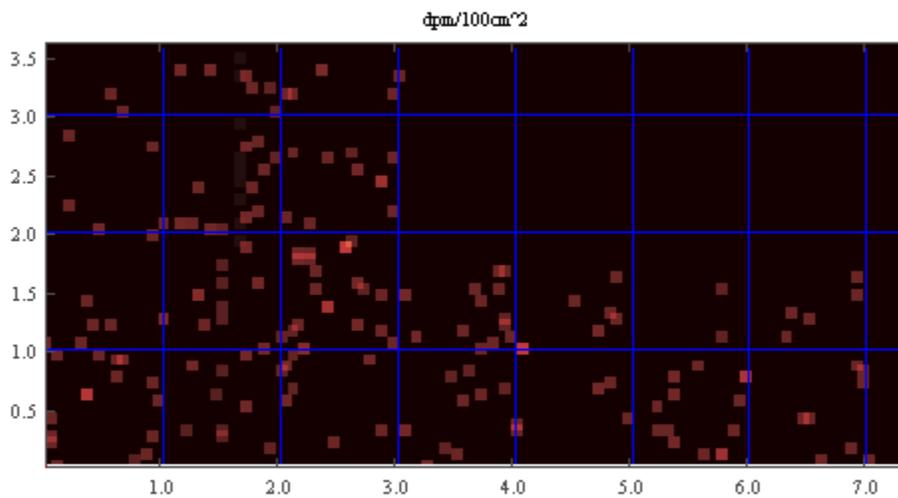


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

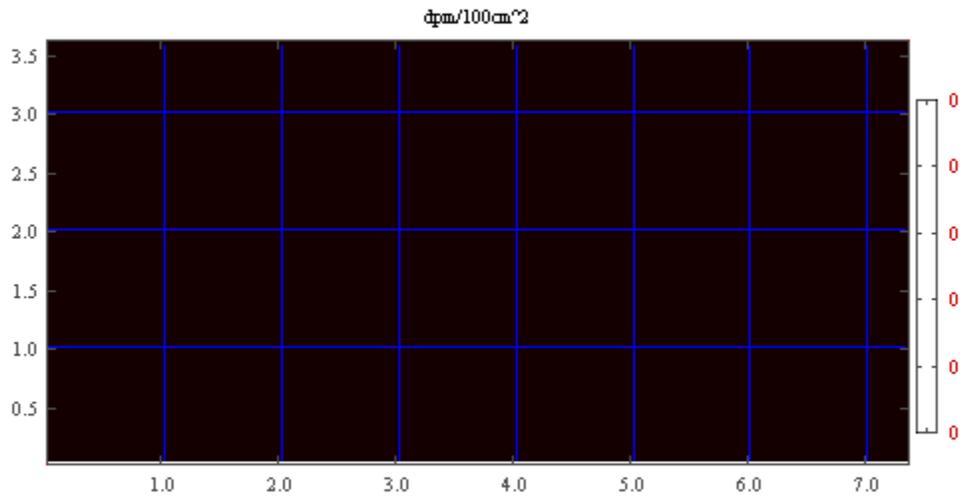


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3911C
Survey Date:	December 20, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

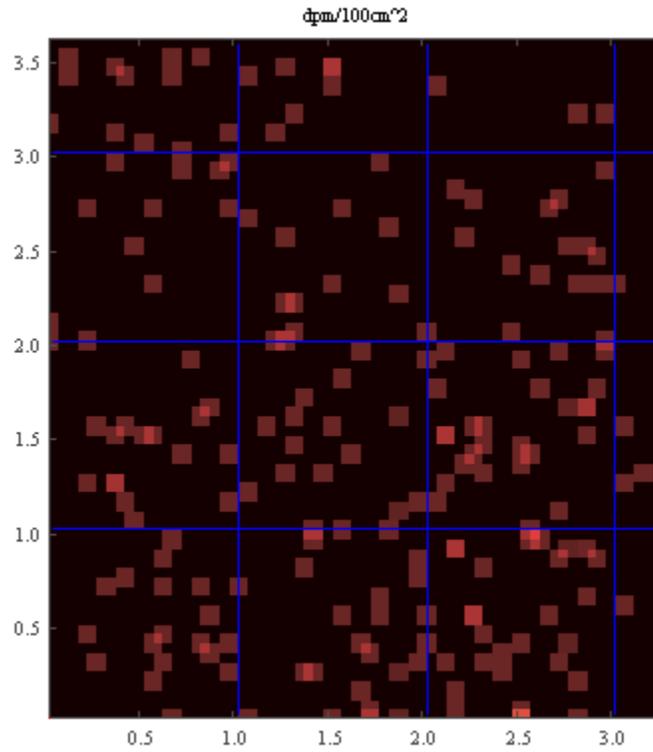


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

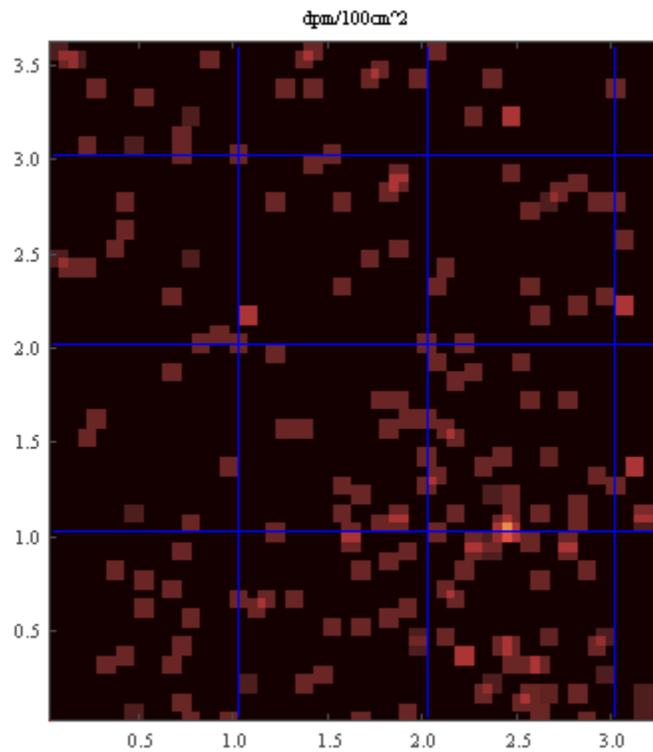


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

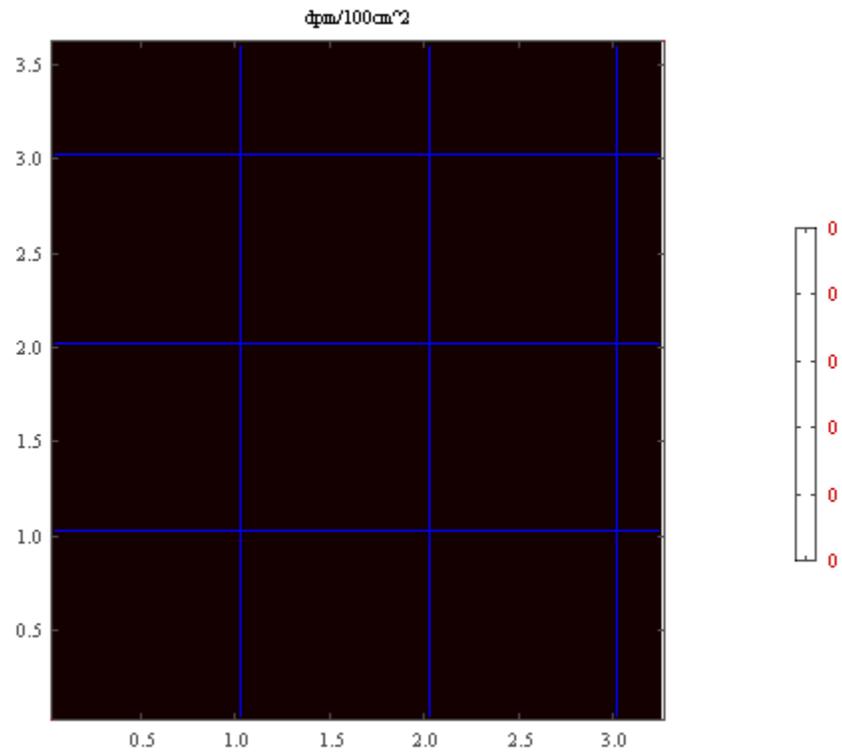


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3911D
Survey Date:	December 20, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

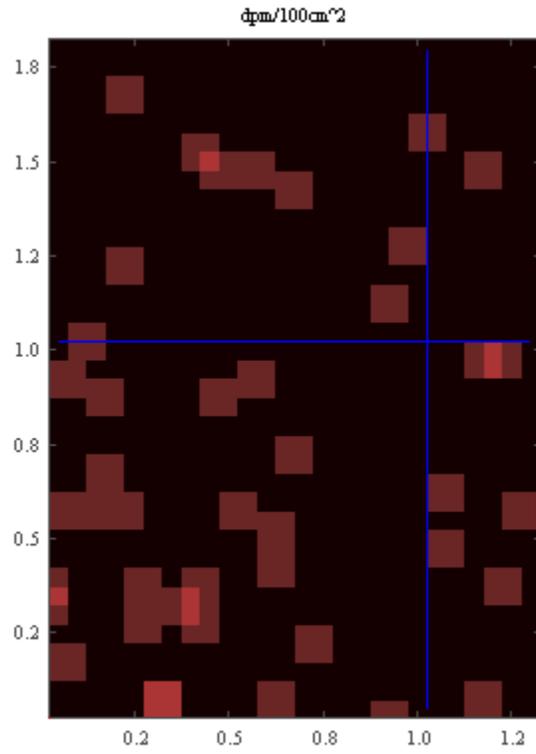


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

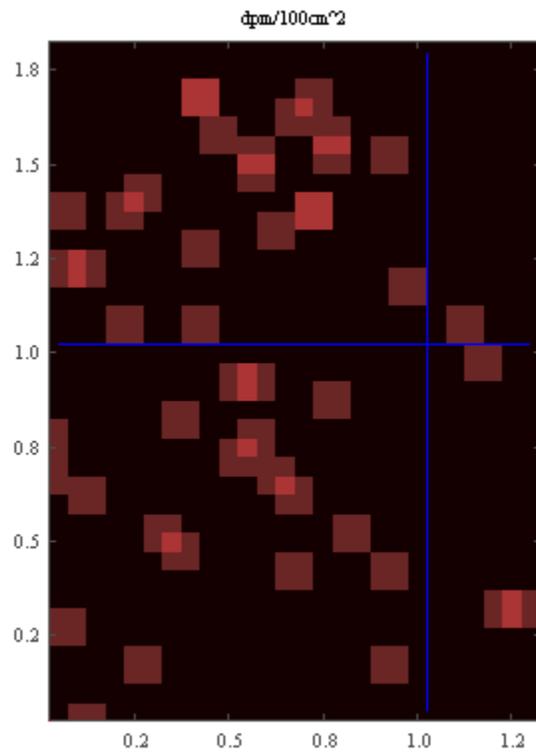


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

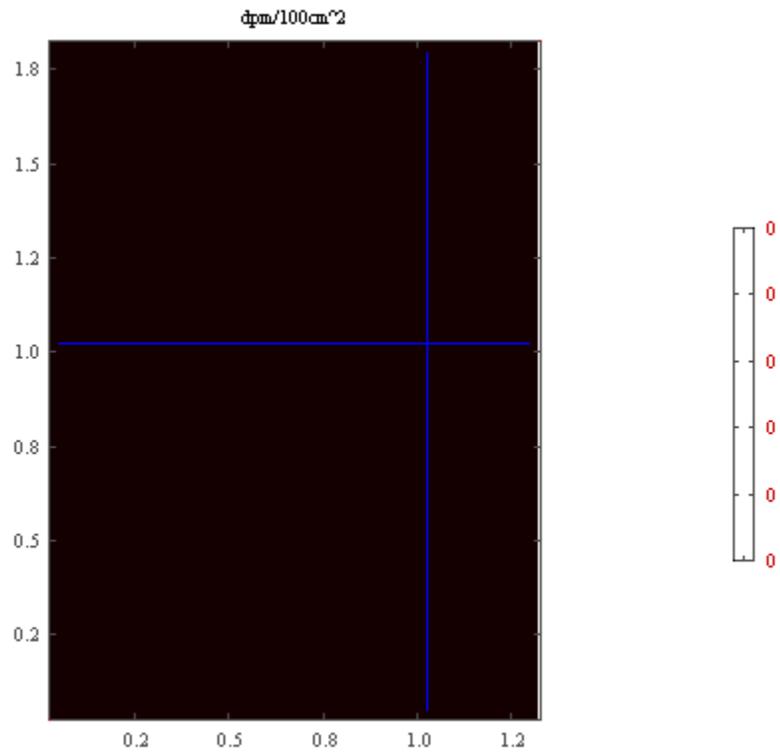


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA3921D
Survey Date:	December 21, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

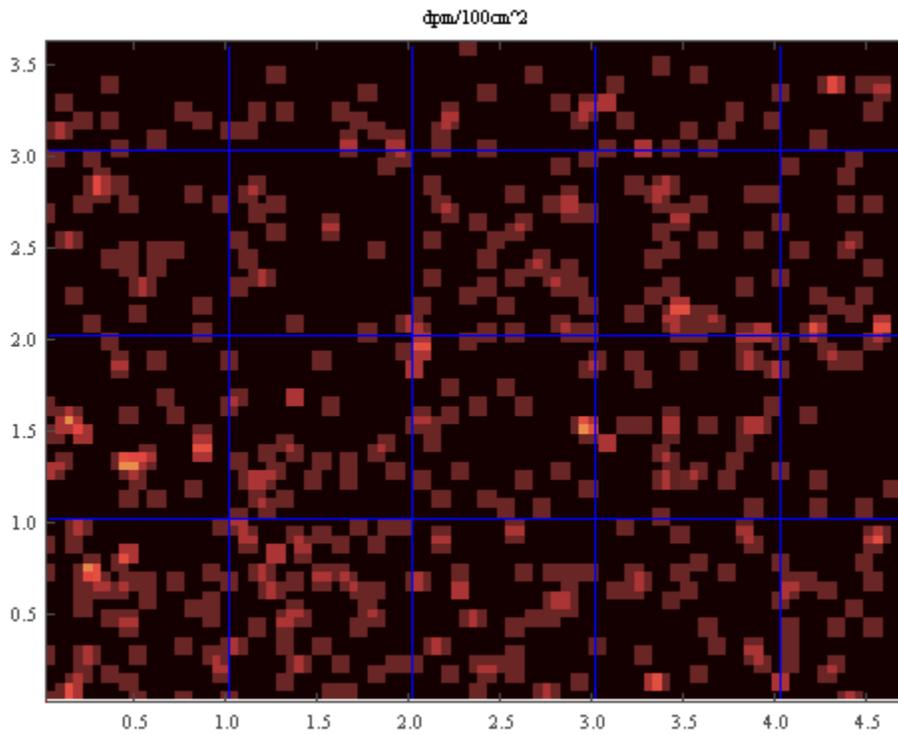


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

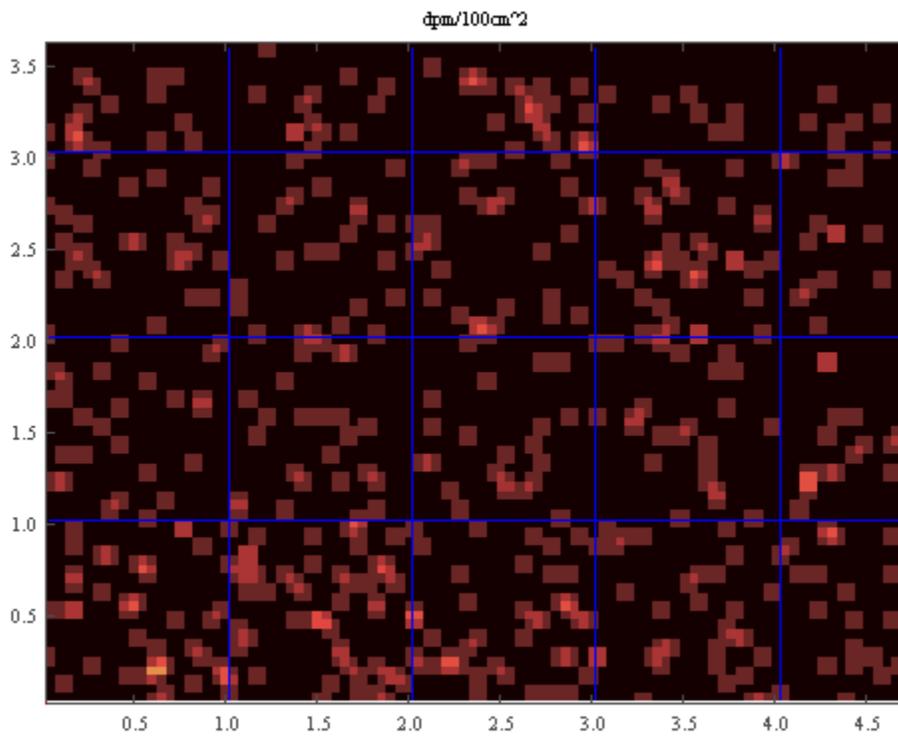


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

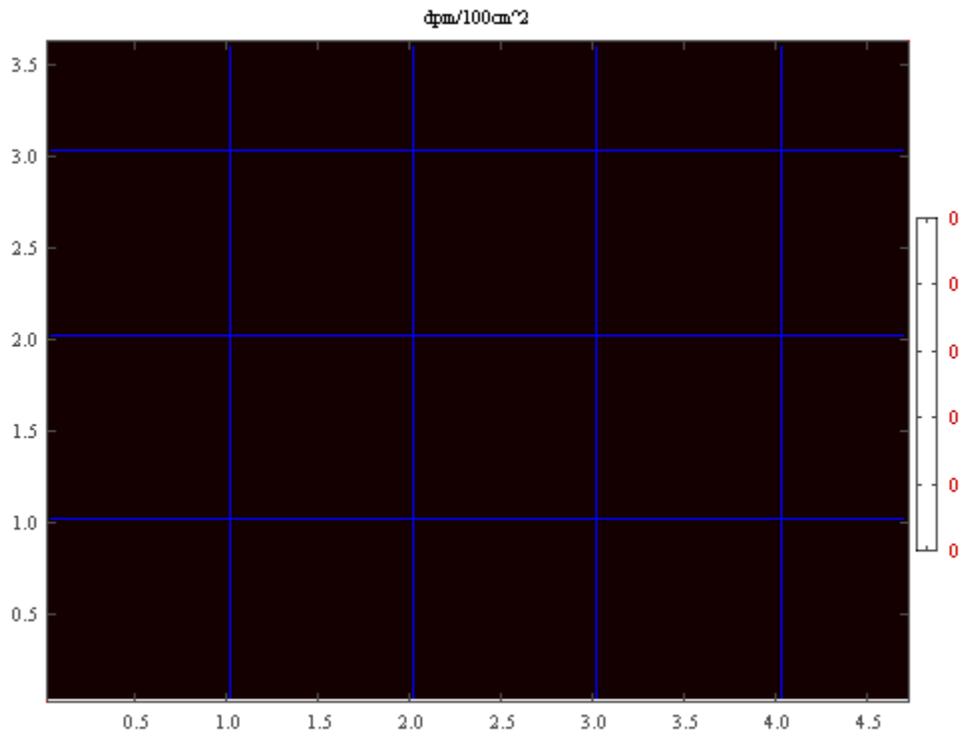


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4001A
Survey Date:	January 9, 1998
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

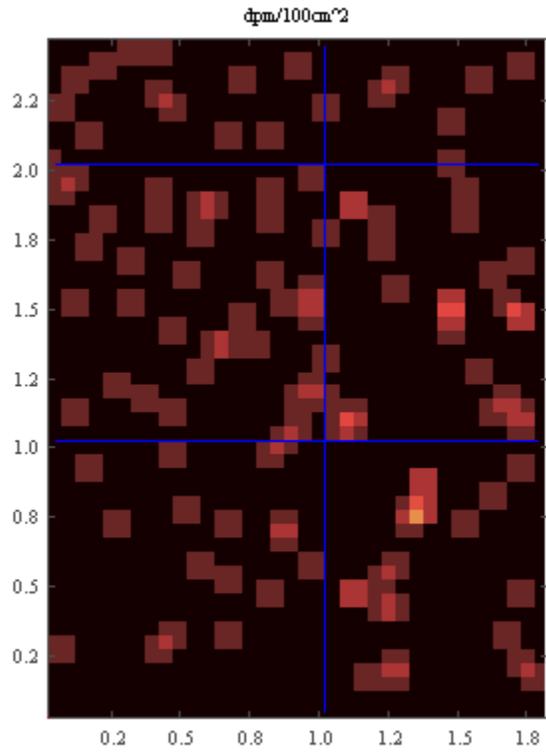


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

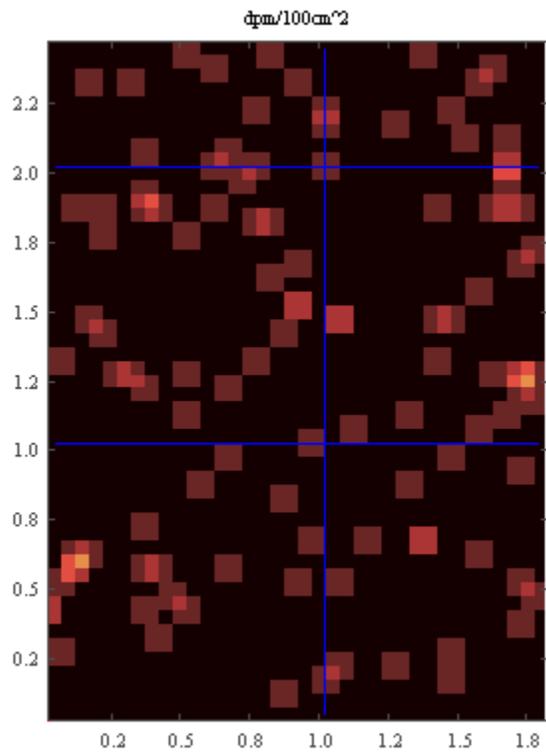


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

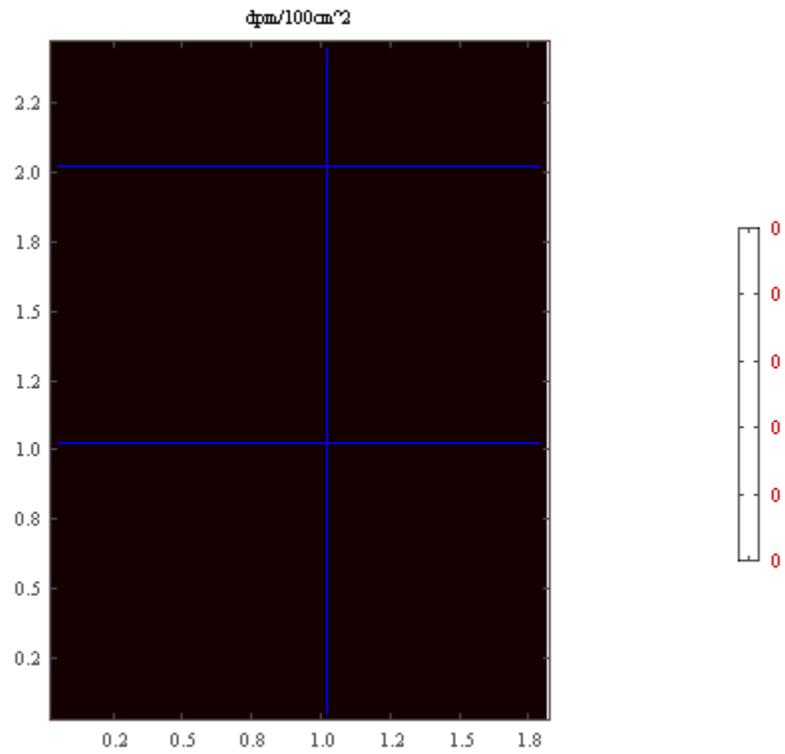


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4001B
Survey Date:	January 1, 2000
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

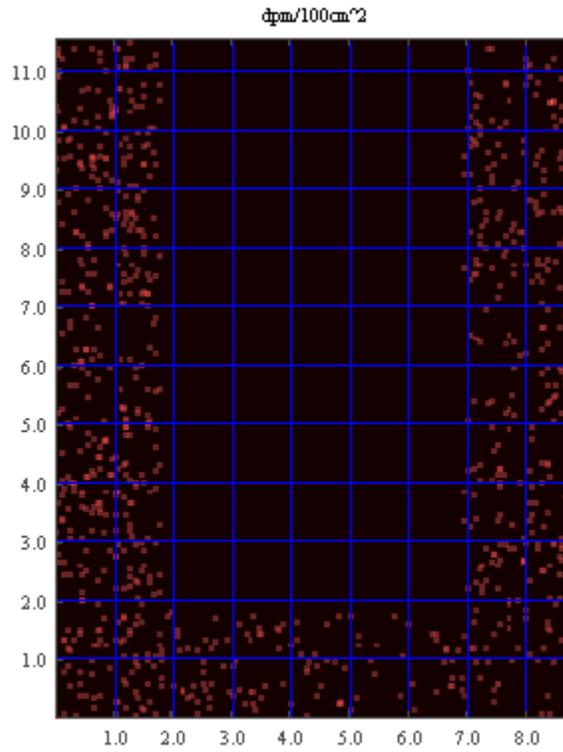


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

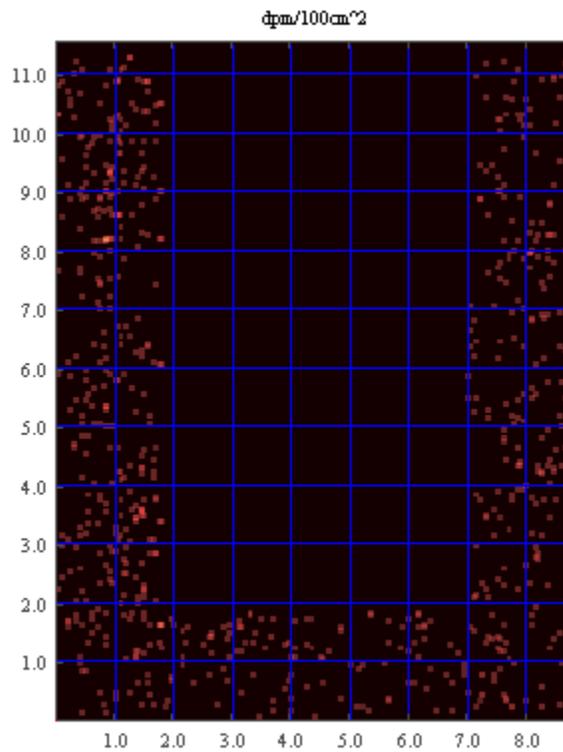


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

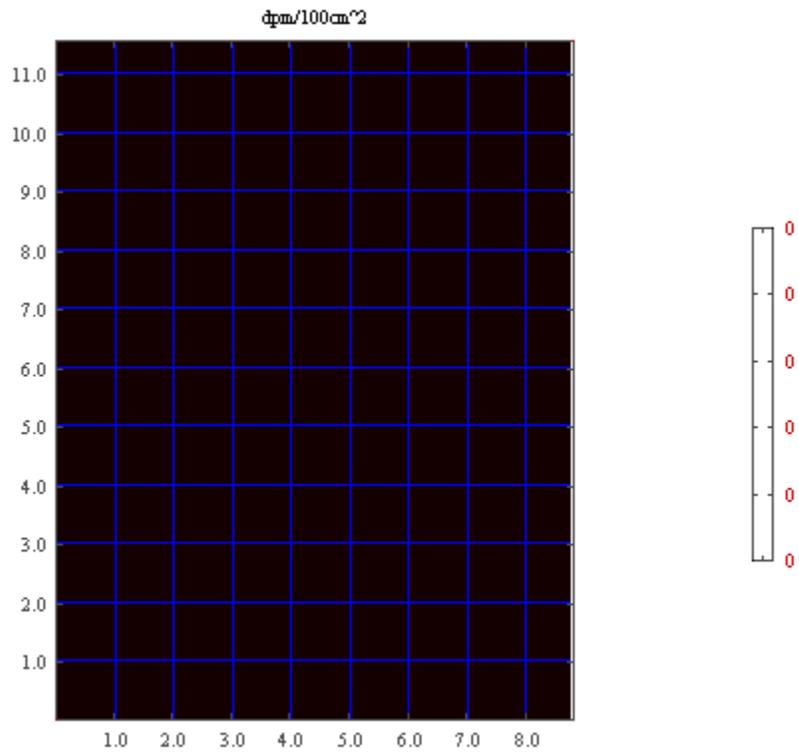


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4011A
Survey Date:	January 9, 1998
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

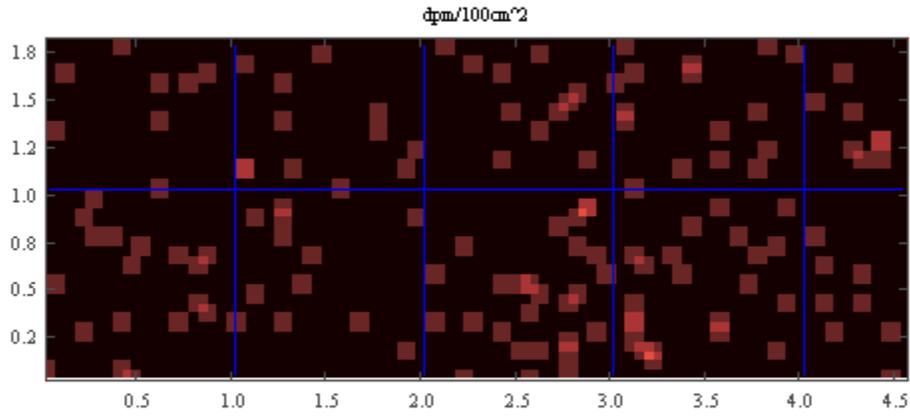


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

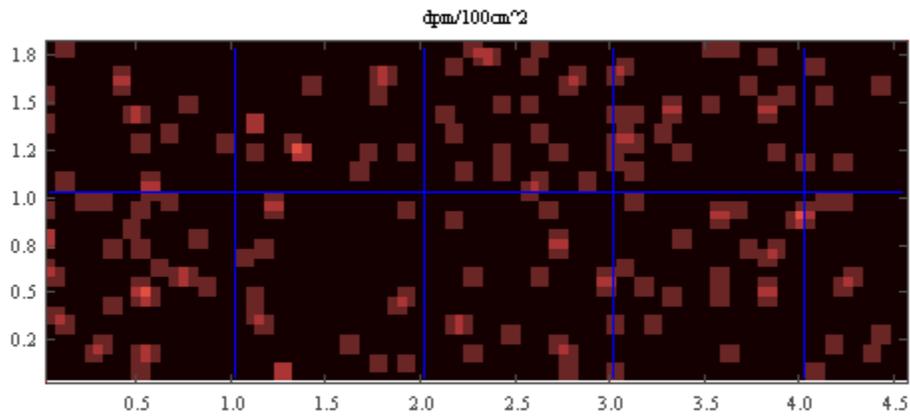


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

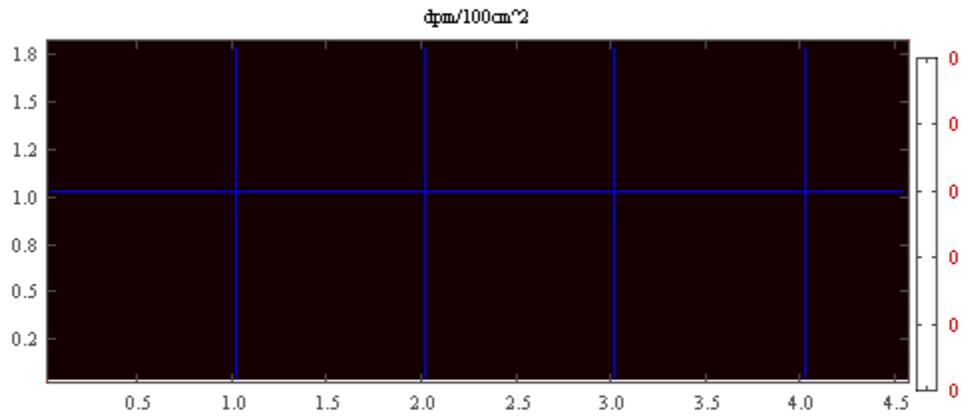


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4021A
Survey Date:	January 9, 1998
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

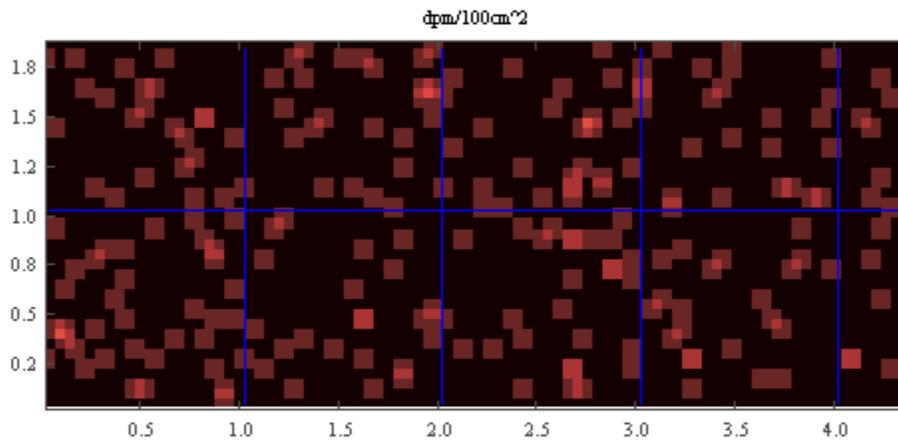


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

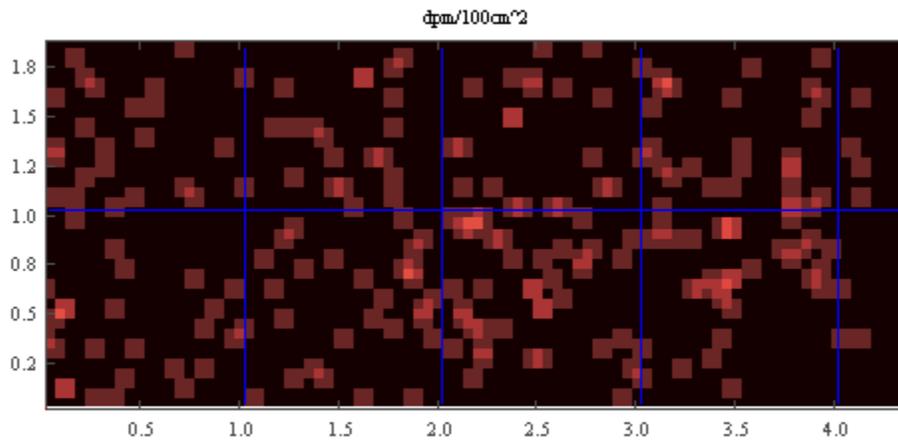


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

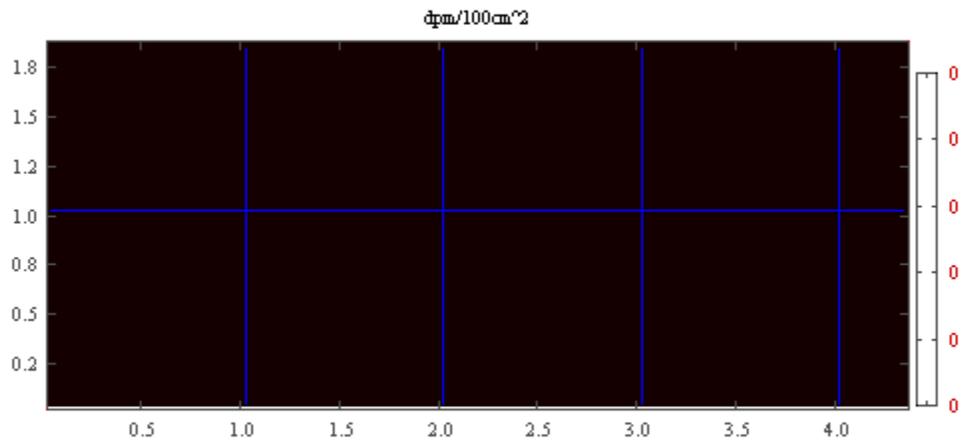


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4101A
Survey Date:	February 7, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

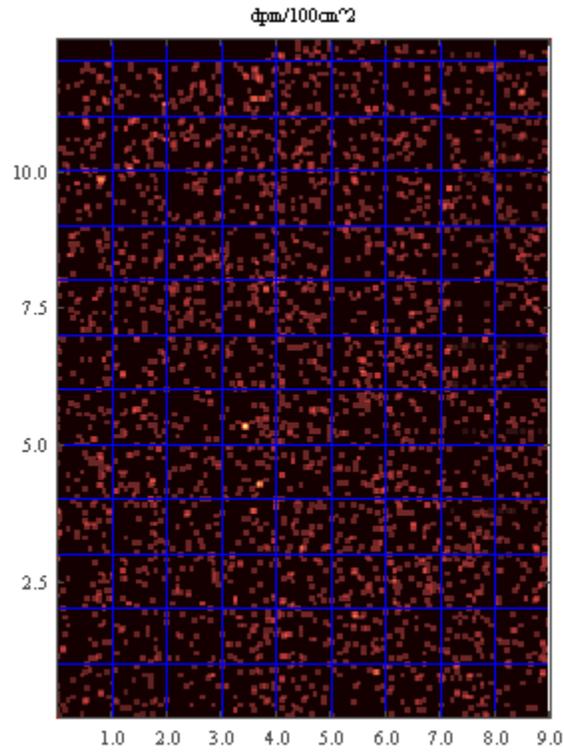


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

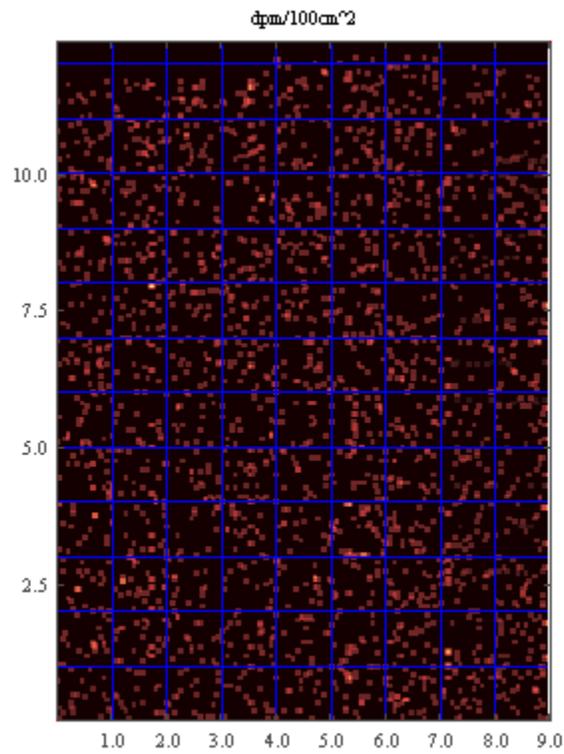


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

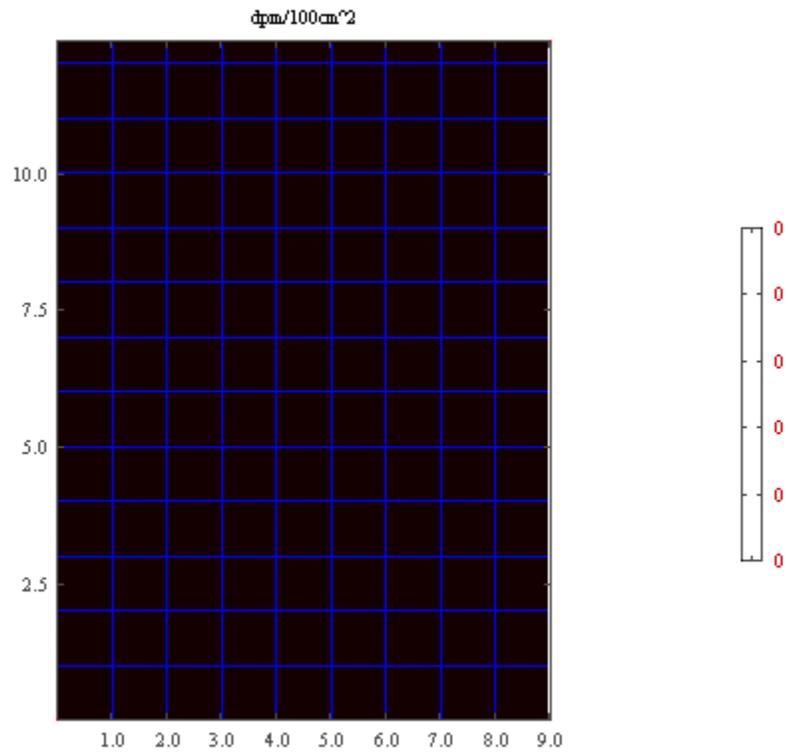


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4101B
Survey Date:	February 8, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	534 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.14 m ²

This survey is not position correlated.

Primary Detector:

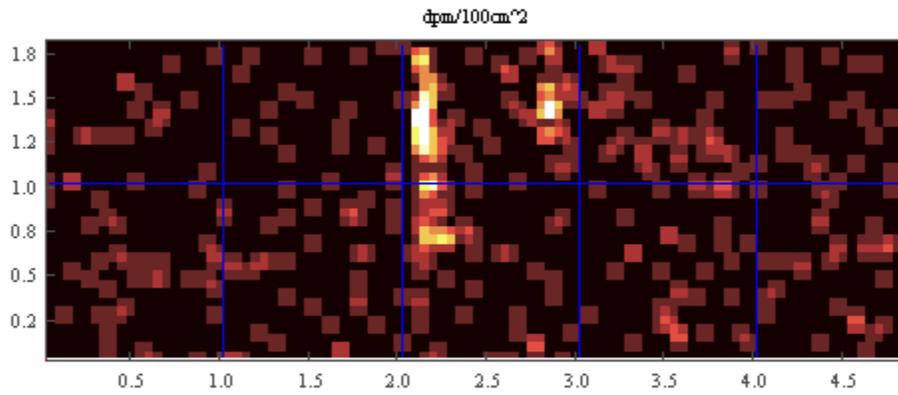


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

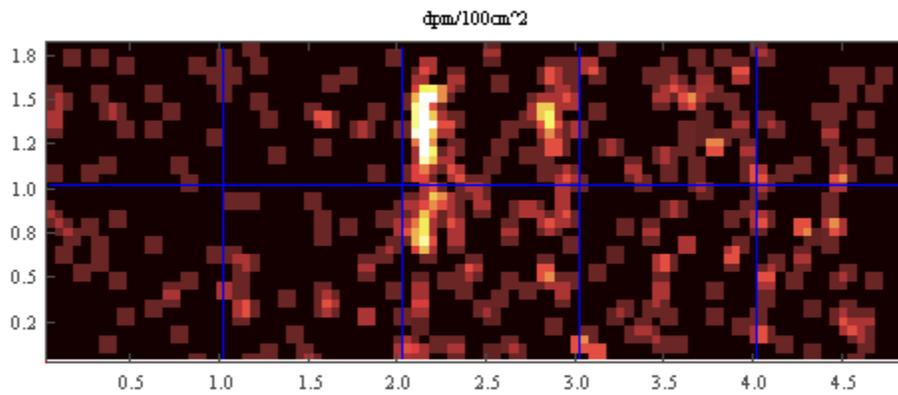


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

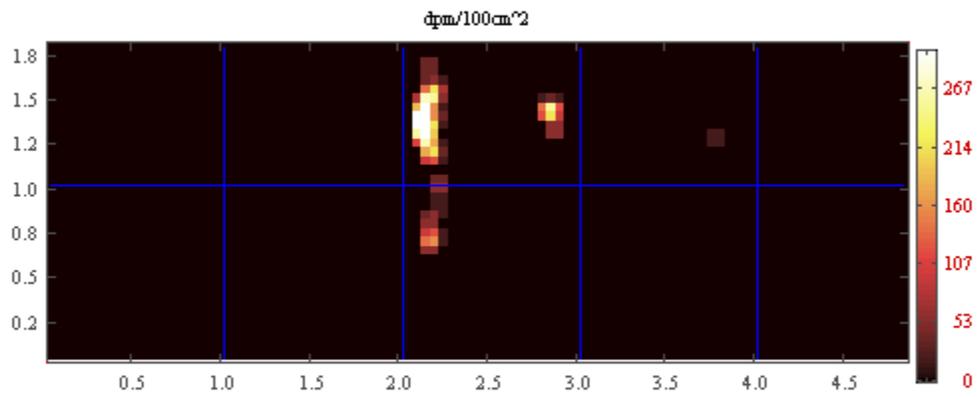


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

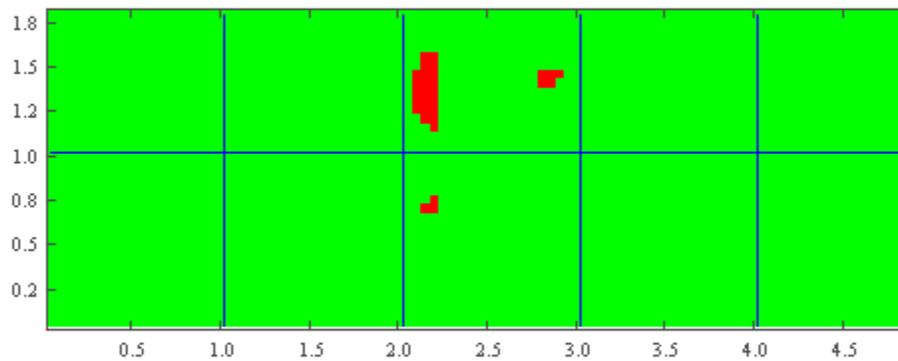


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	534	44	(215,135)	(0,130)	N/A		
Spot	270	44	(215,150)	(0,145)	N/A		
Spot	254	58	(285,145)	(0,140)	N/A		
Spot	215	44	(220,120)	(5,115)	N/A		
Spot	156	44	(220,70)	(5,65)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4111A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

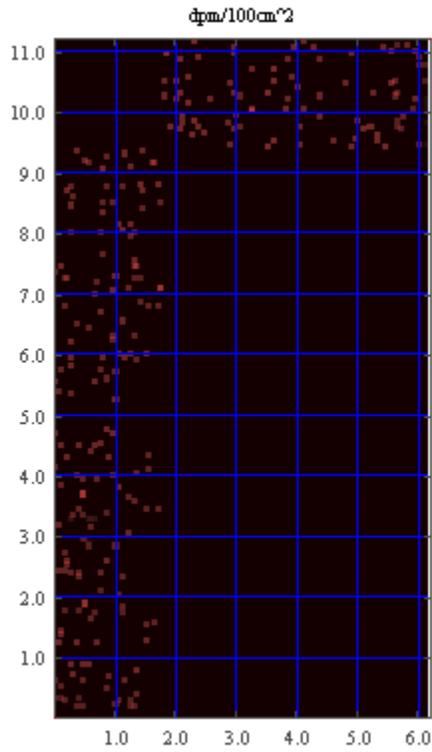


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

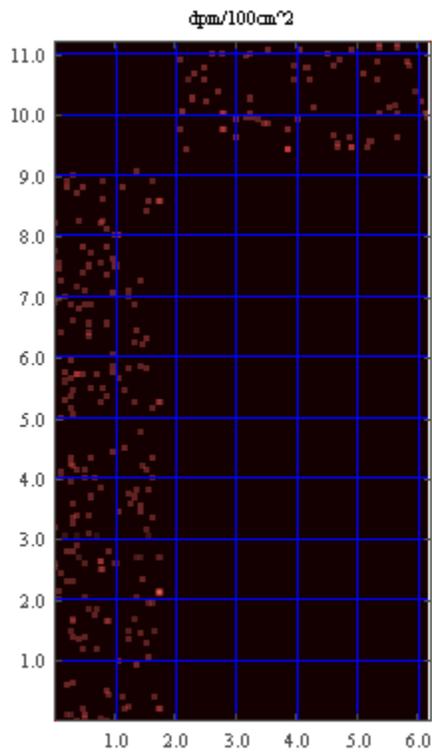


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

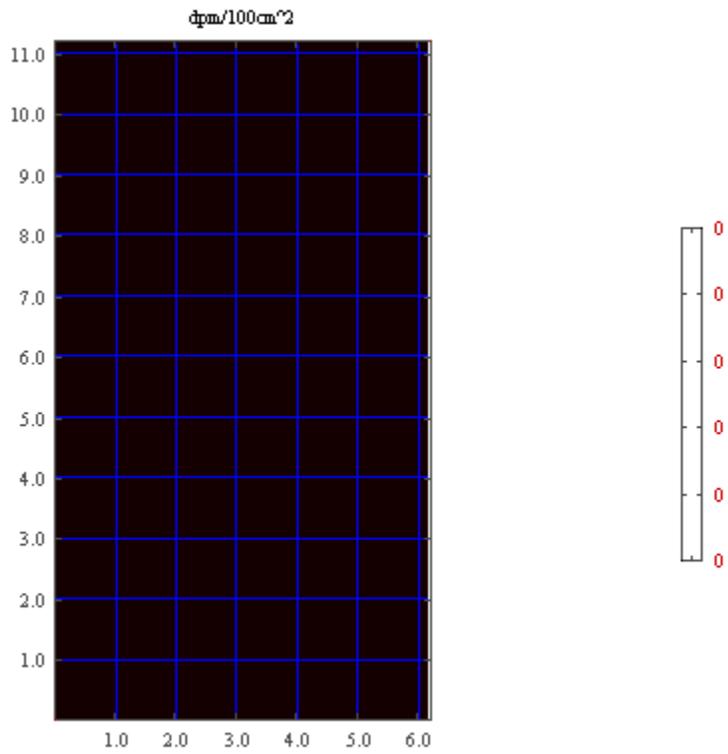


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4111B
Survey Date:	February 8, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	117 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.01 m ²

This survey is not position correlated.

Primary Detector:

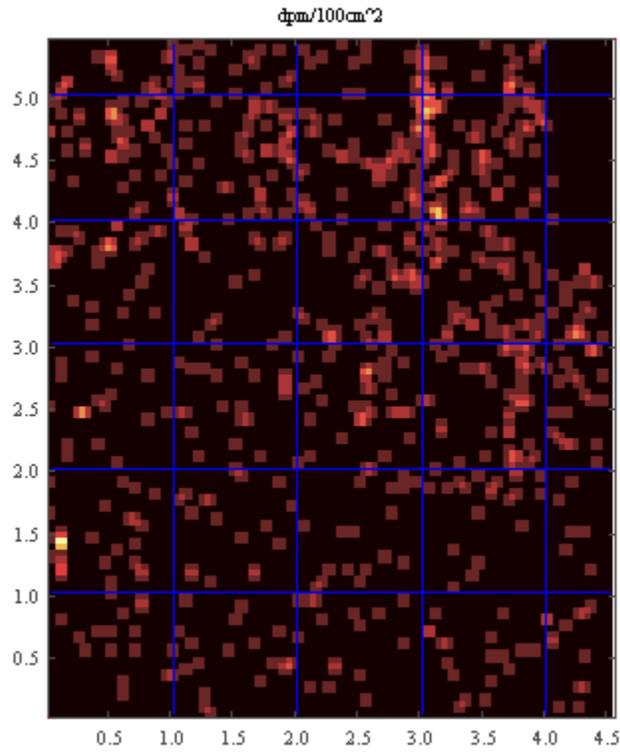


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

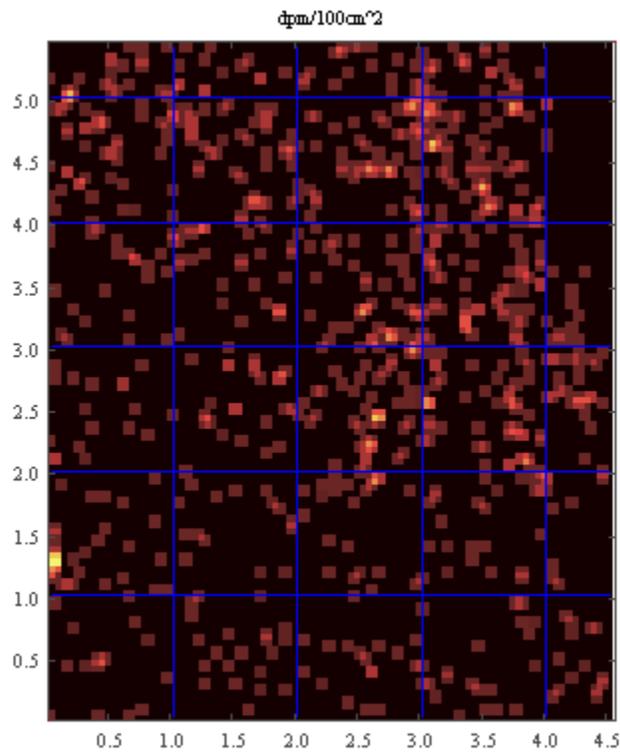


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

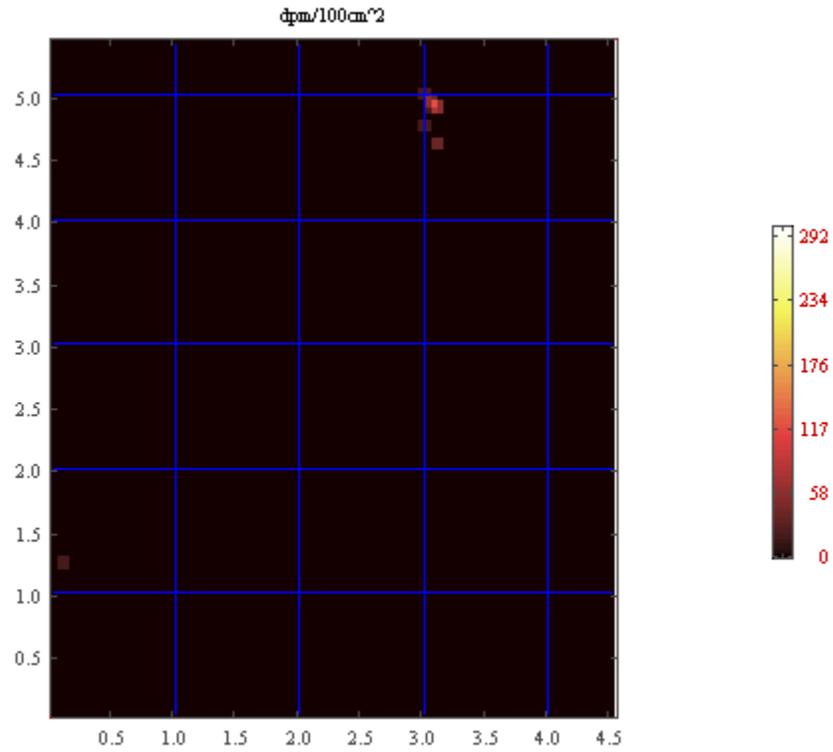


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

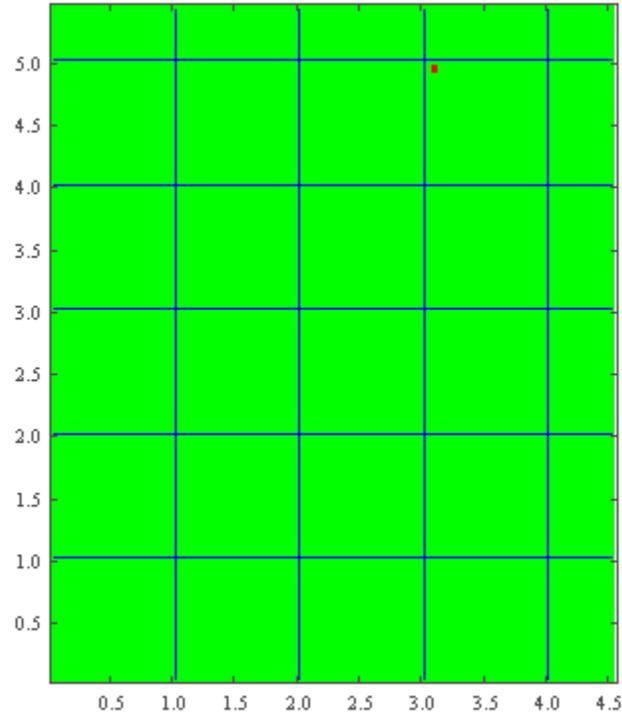


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	117	242	(310,495)	(5,125)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4121A
Survey Date:	February 22, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

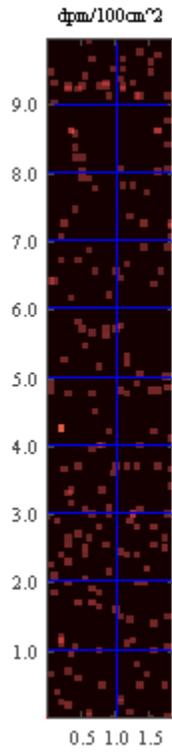


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

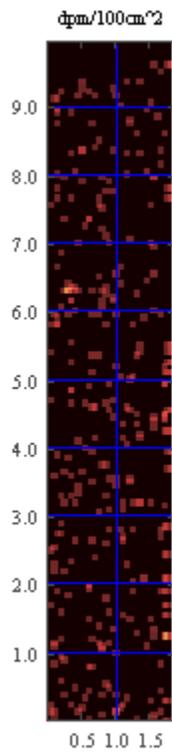


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

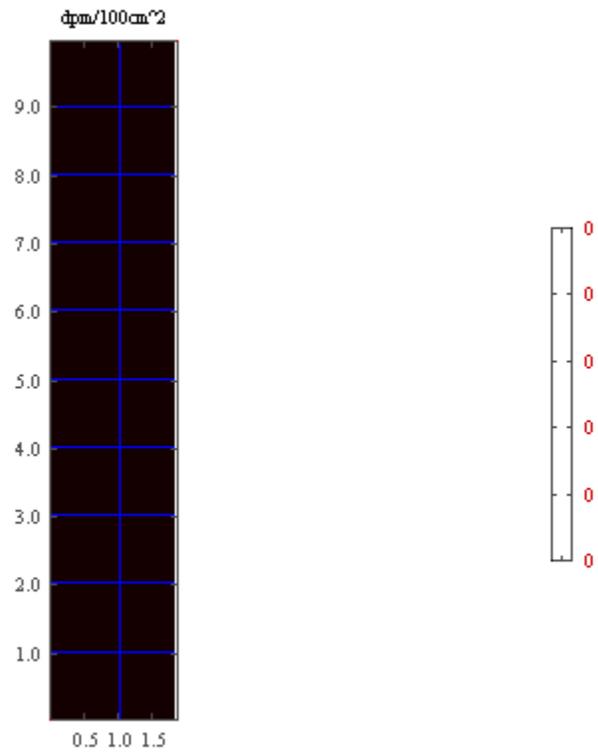


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4131A
Survey Date:	February 24, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	289 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.25 m ²

This survey is not position correlated.

Primary Detector:

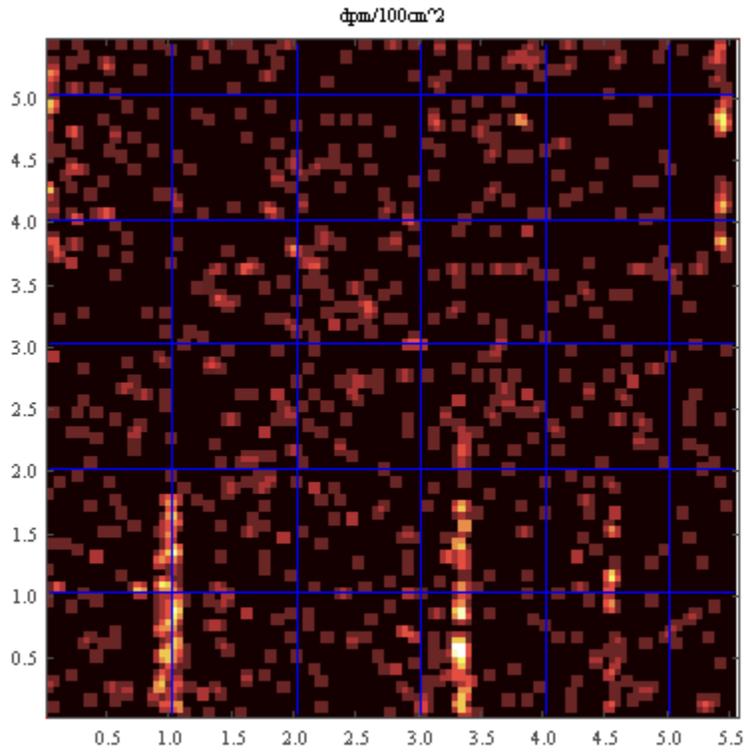


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

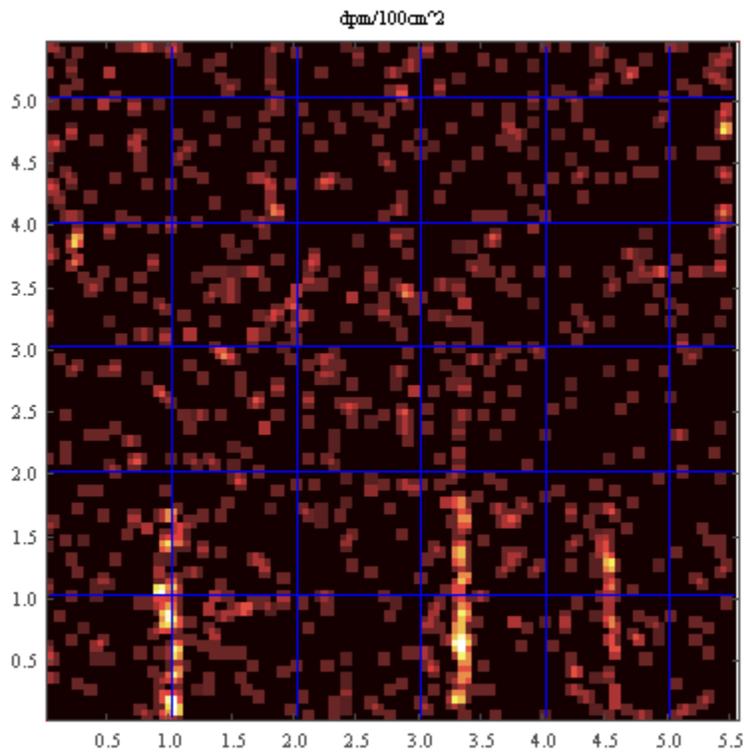


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

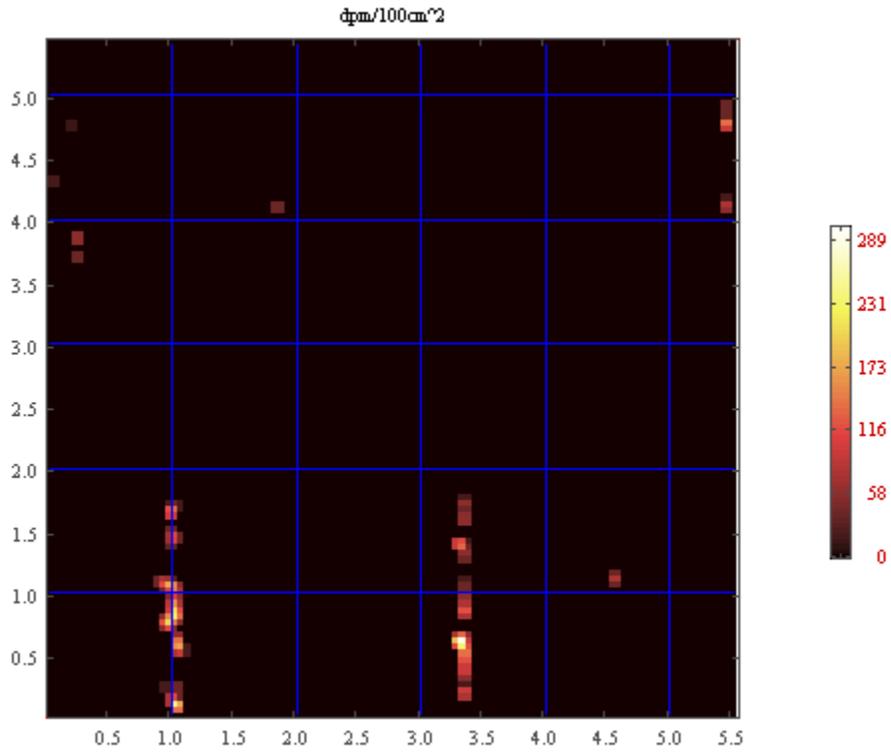


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

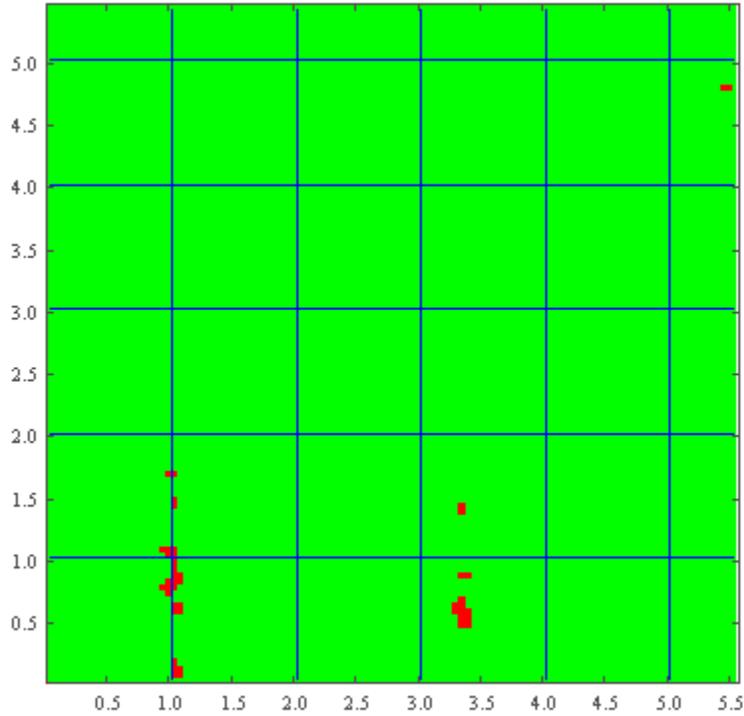


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	289	68	(335,65)	(0,55)	N/A		
Spot	250	22	(105,15)	(0,5)	N/A		
Spot	235	22	(105,85)	(0,75)	N/A		
Spot	177	20	(100,110)	(5,100)	N/A		
Spot	174	22	(110,60)	(5,50)	N/A		
Spot	138	22	(105,170)	(0,160)	N/A		
Spot	137	330	(545,480)	(0,110)	N/A		
Spot	135	68	(335,140)	(0,130)	N/A		
Spot	117	68	(335,50)	(0,40)	N/A		
Spot	117	68	(335,90)	(0,80)	N/A		
Spot	112	22	(105,150)	(0,140)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4131B
Survey Date:	February 23, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

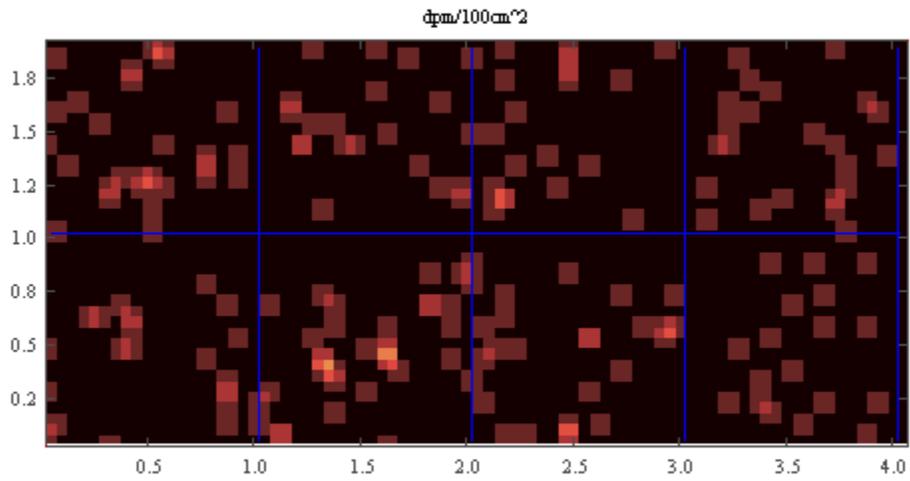


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

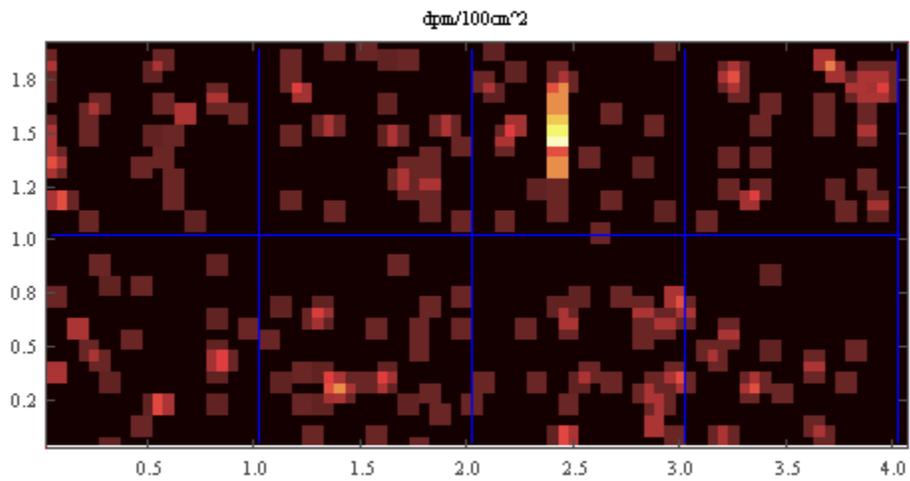


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

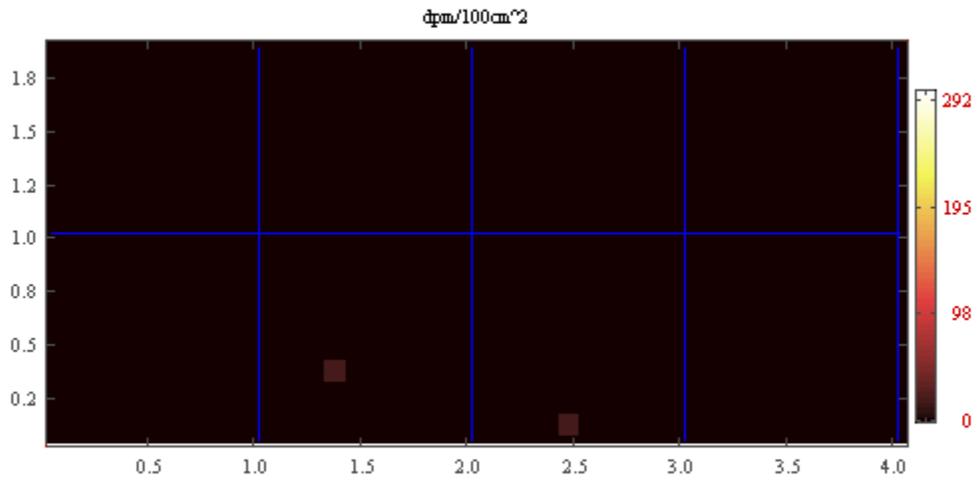


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4131C
Survey Date:	February 25, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	780 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.12 m ²

This survey is not position correlated.

Primary Detector:

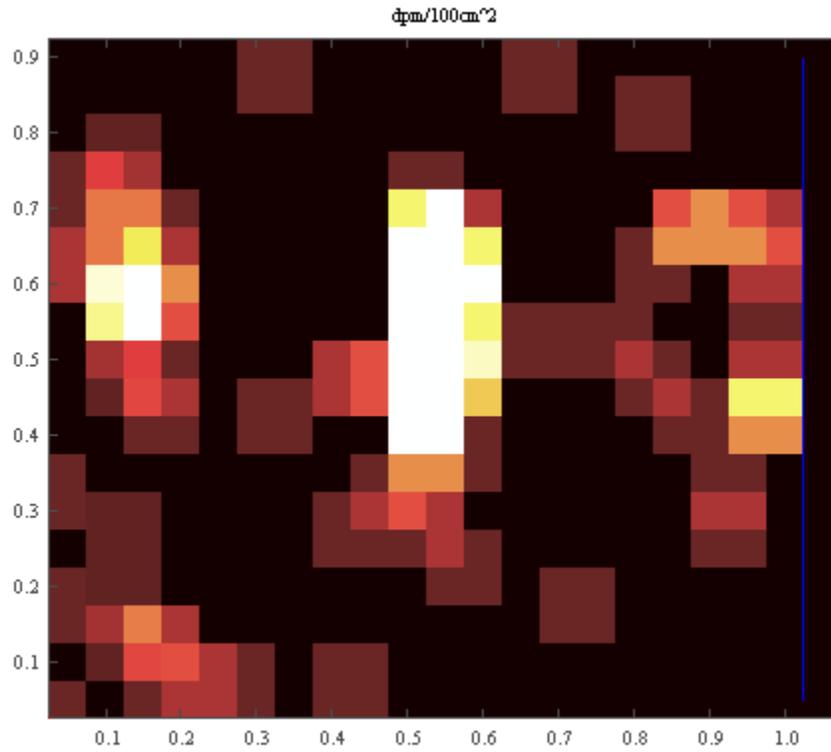


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

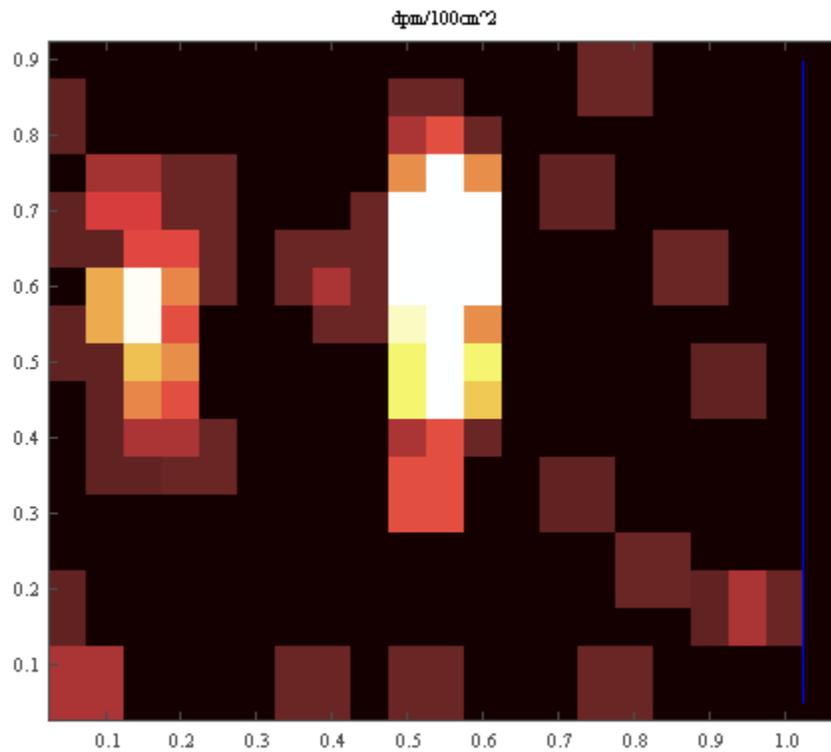


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

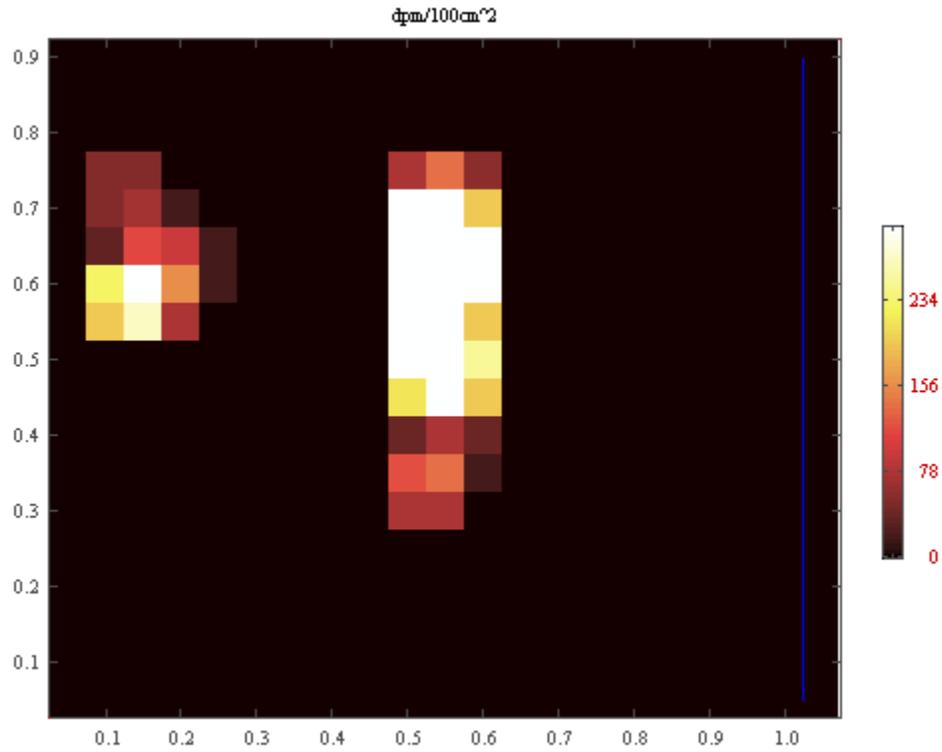


Figure 3: Meter Grid overlaid onto image plot of $100cm^2$ areas. The color scale is in dpm per $100cm^2$.

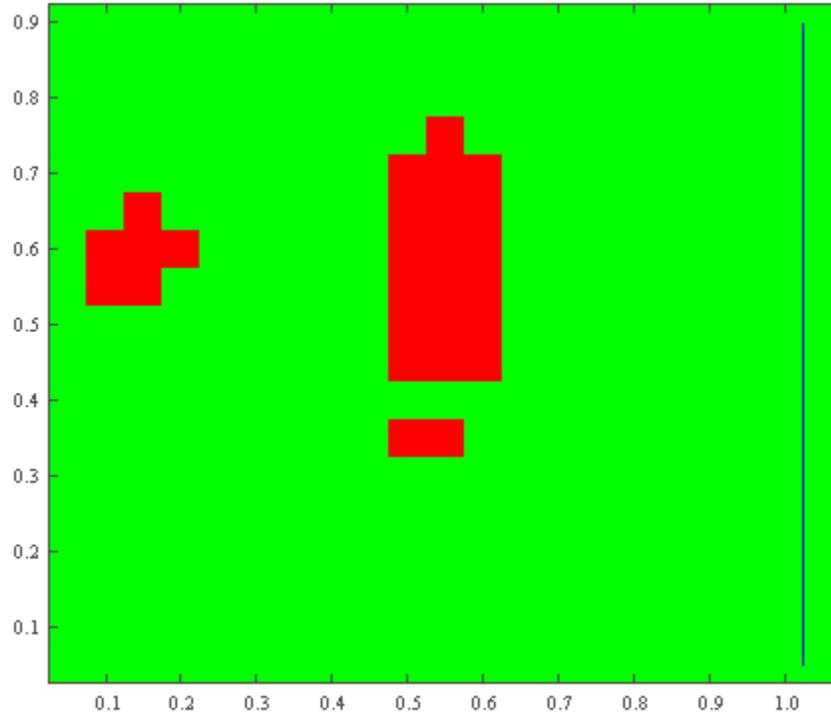


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to $100cm^2$ areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	780	12	(55,65)	(0,60)	N/A		
Spot	663	12	(55,50)	(0,45)	N/A		
Spot	367	4	(15,60)	(0,55)	N/A		
Spot	137	12	(55,35)	(0,30)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4201A
Survey Date:	February 10, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

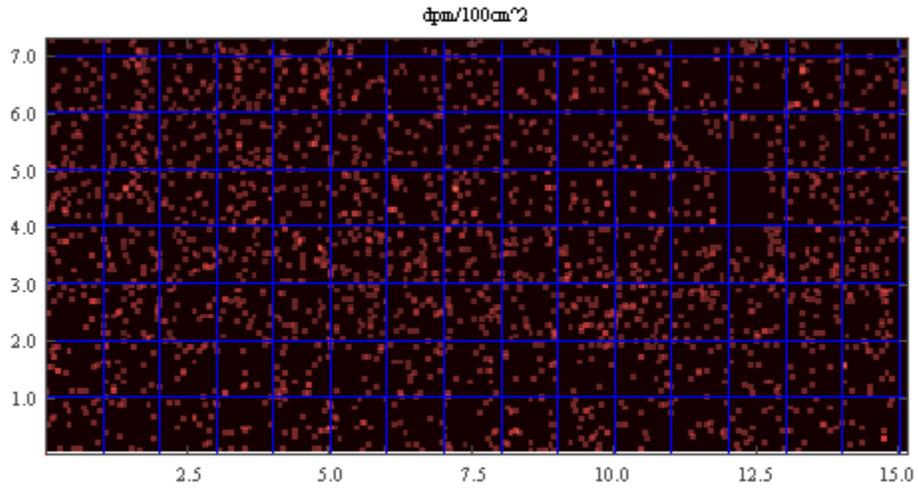


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

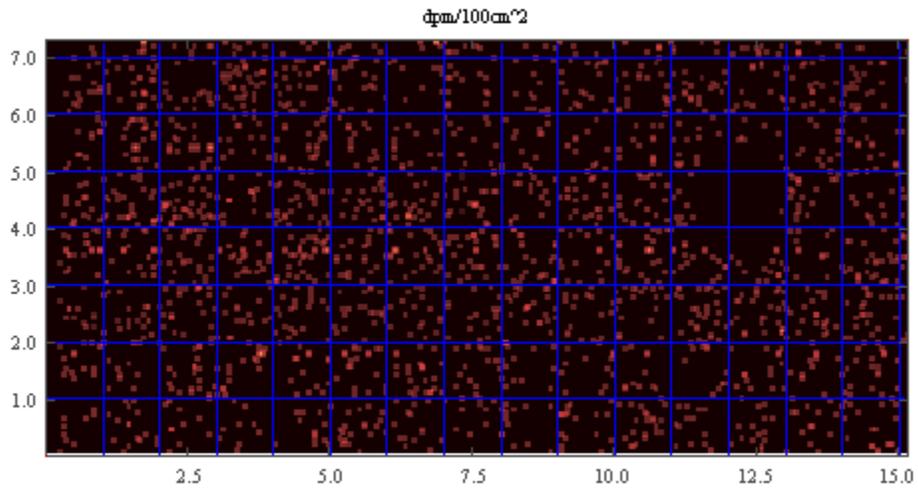


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

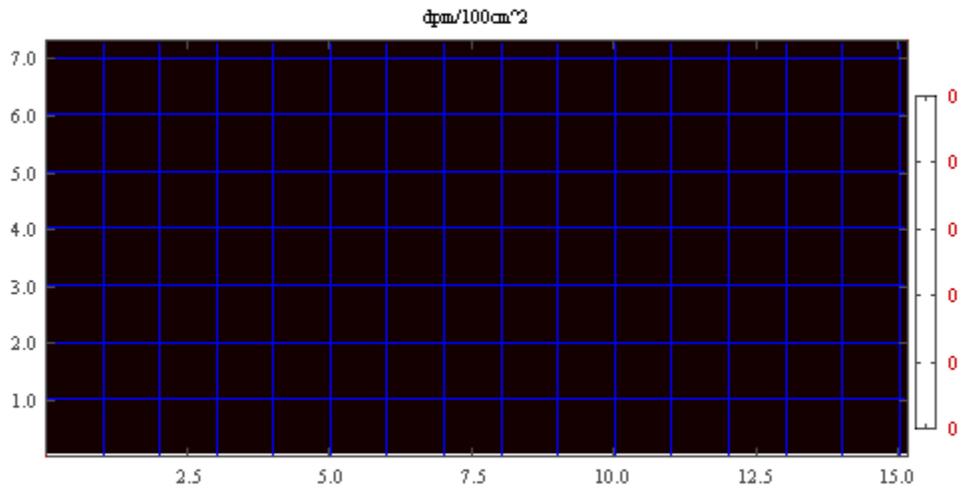


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4201B
Survey Date:	February 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

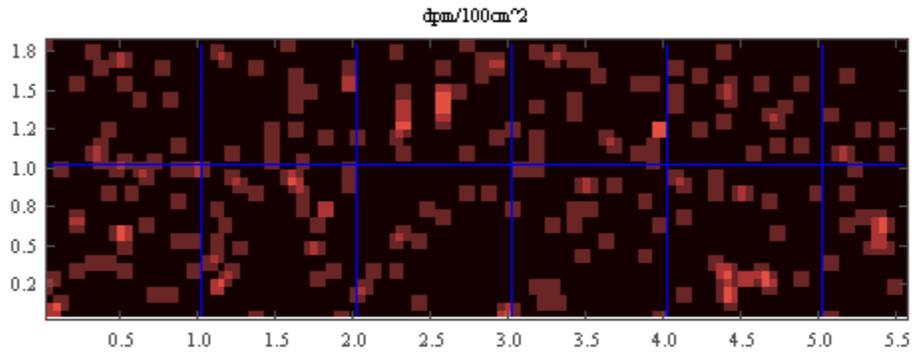


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

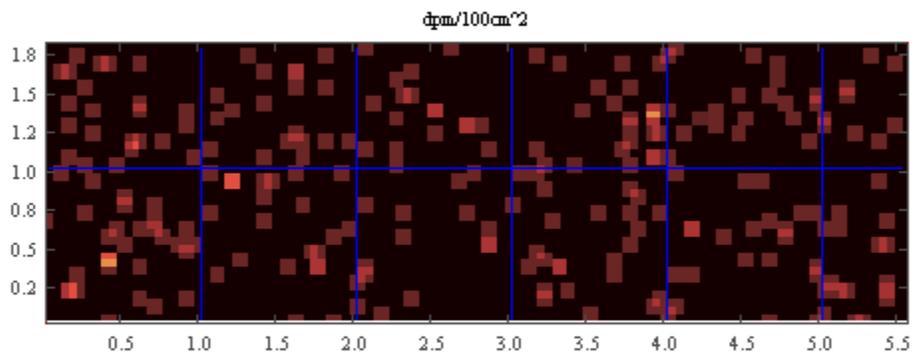


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA4211A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

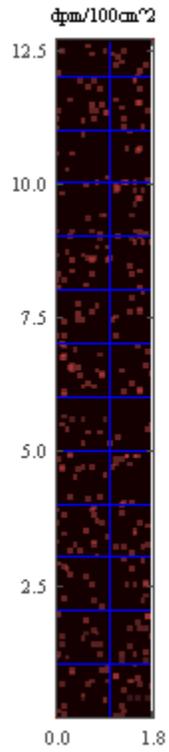


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

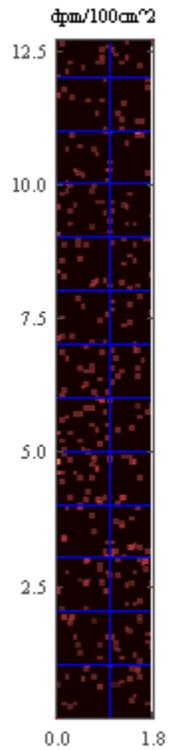


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

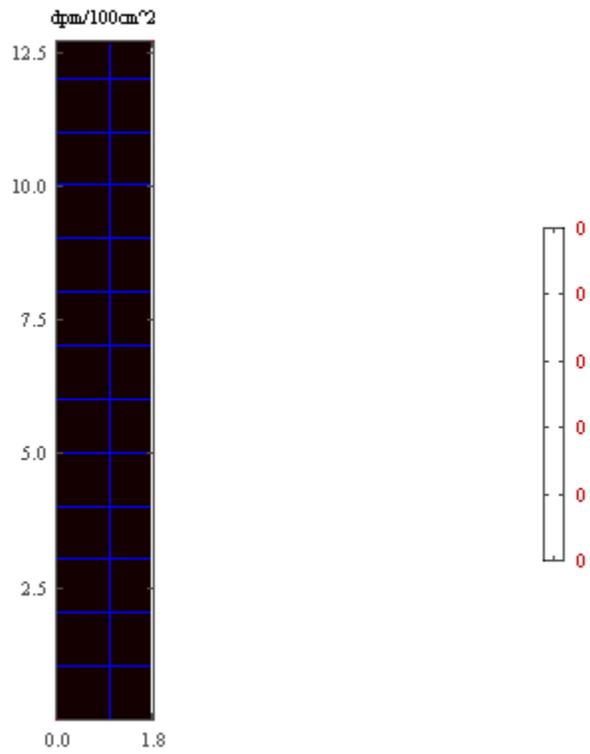


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4211B
Survey Date:	February 9, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

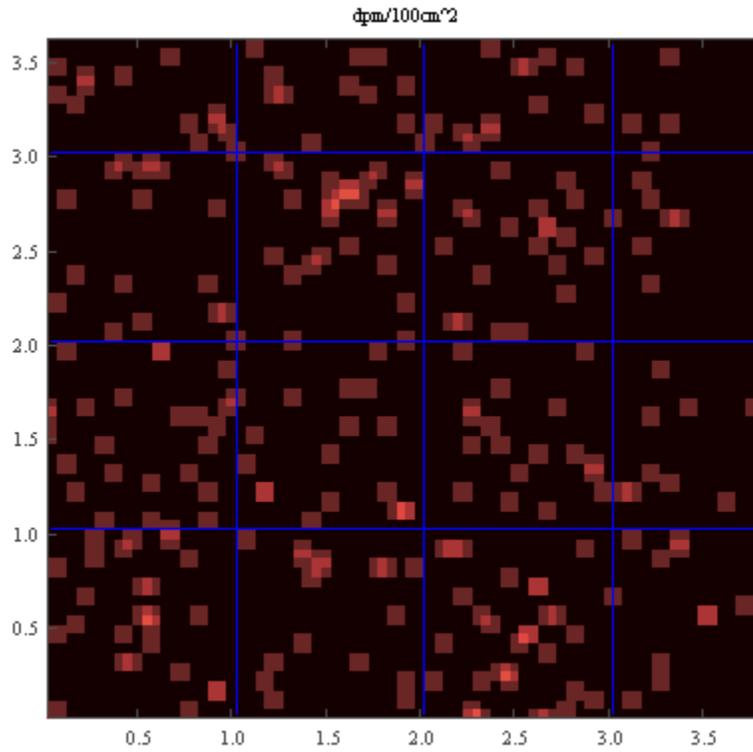


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

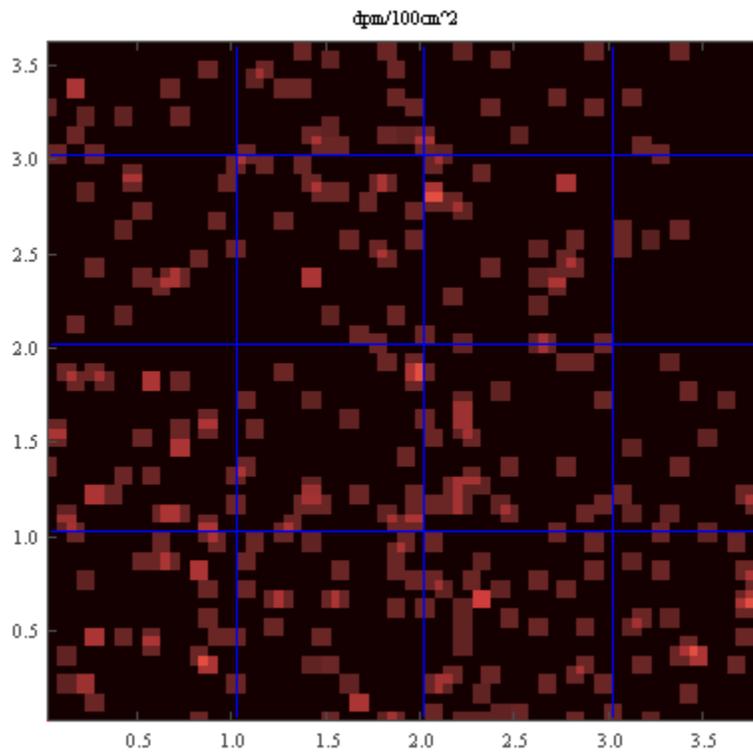


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

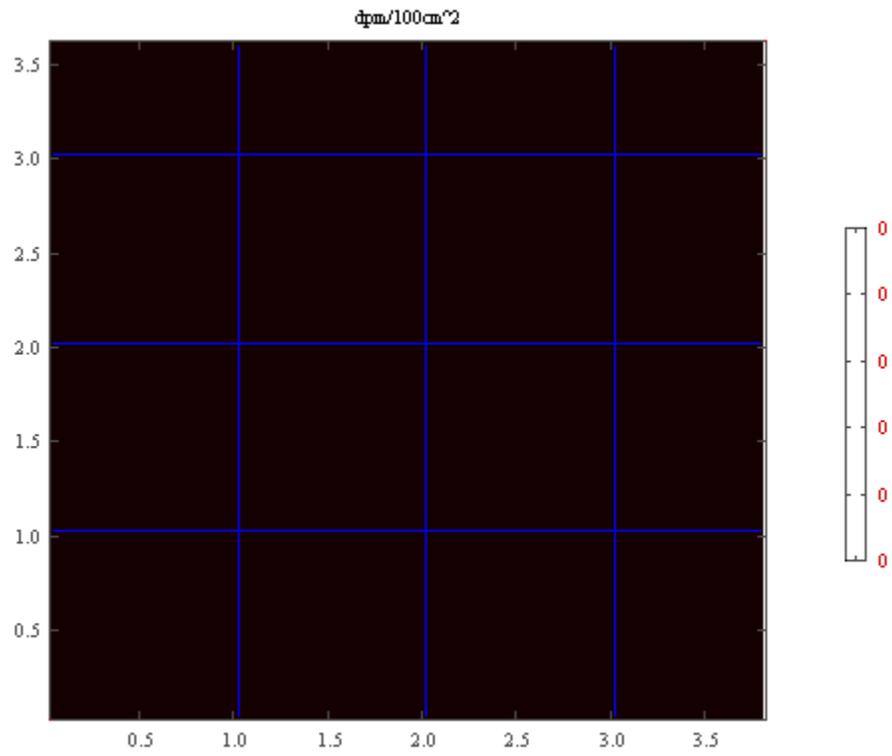


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4211C
Survey Date:	February 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

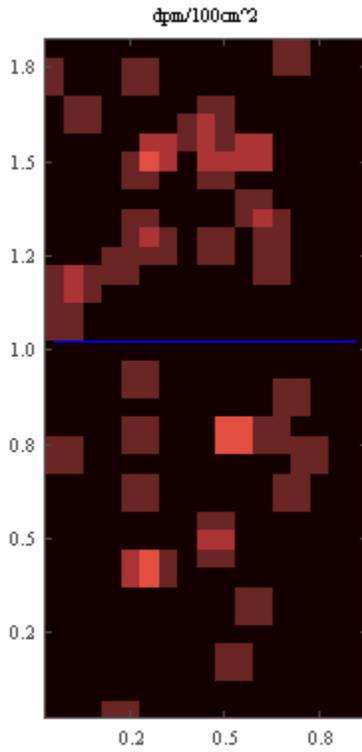


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

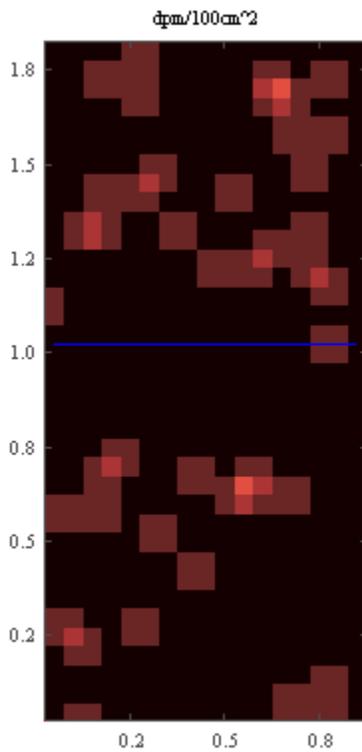


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

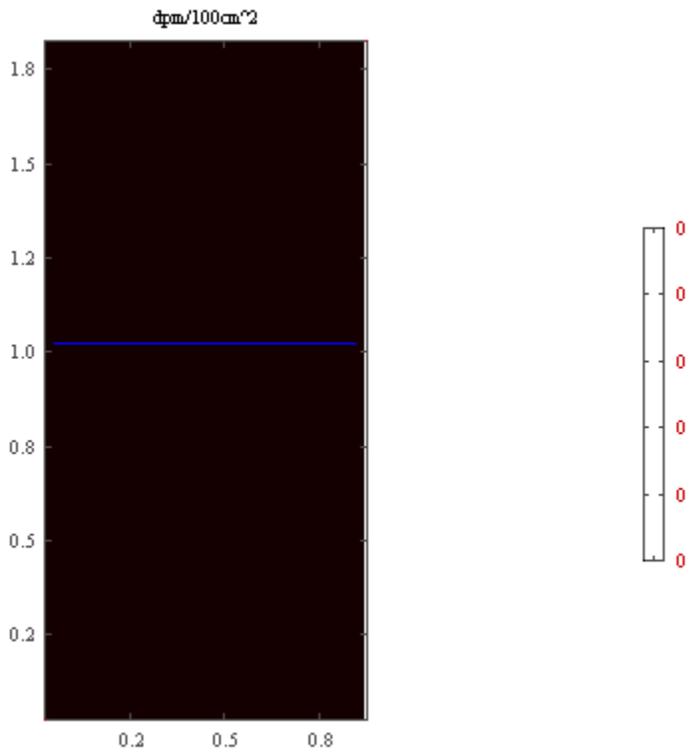


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4211D
Survey Date:	February 22, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	PATRICK'S
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

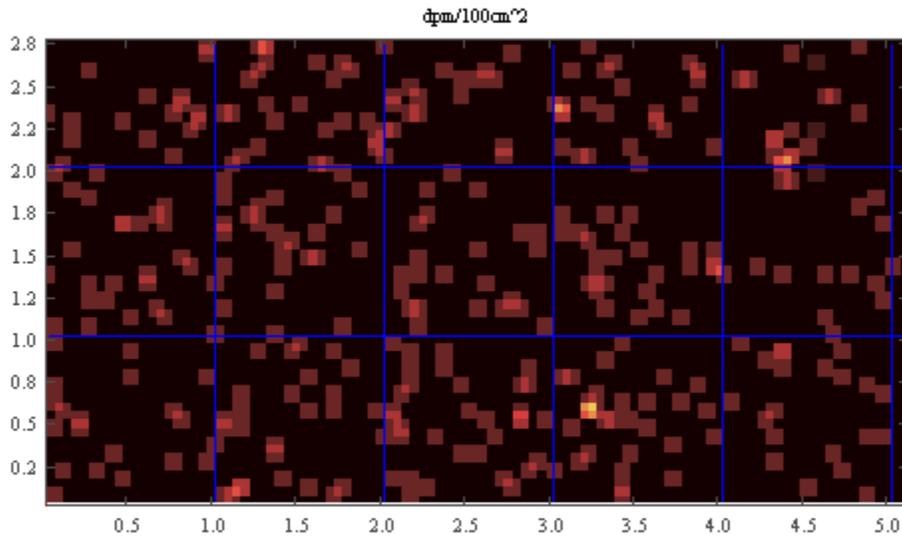


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

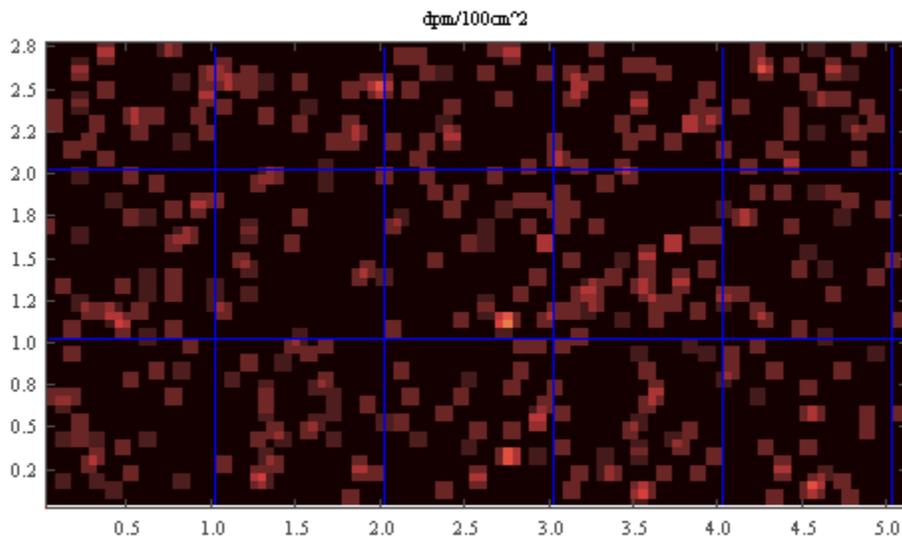


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

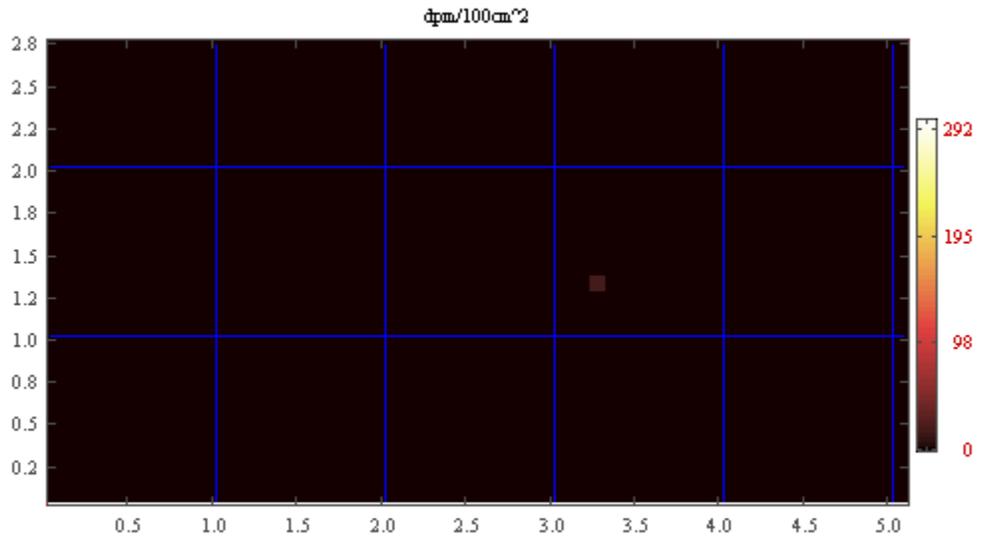


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4221A
Survey Date:	February 18, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

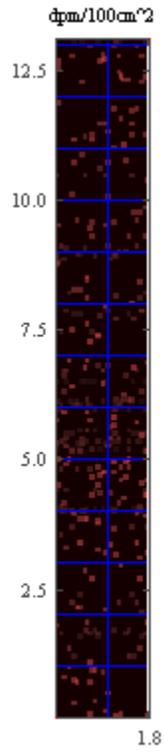


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

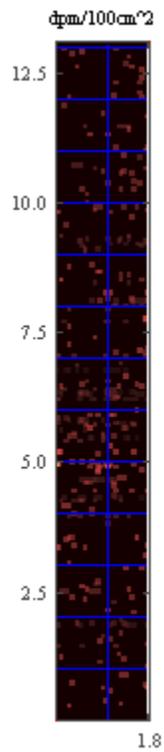


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

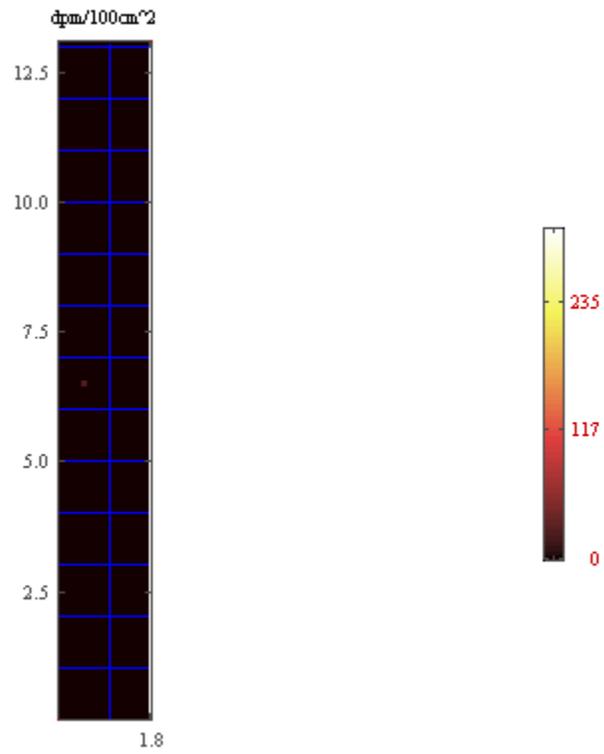


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4221B
Survey Date:	February 21, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

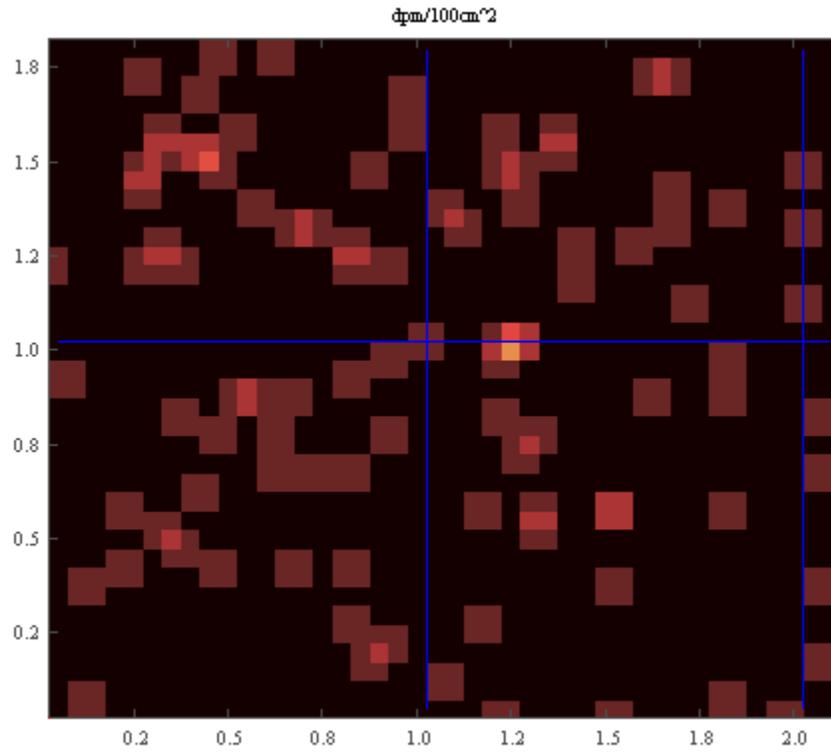


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

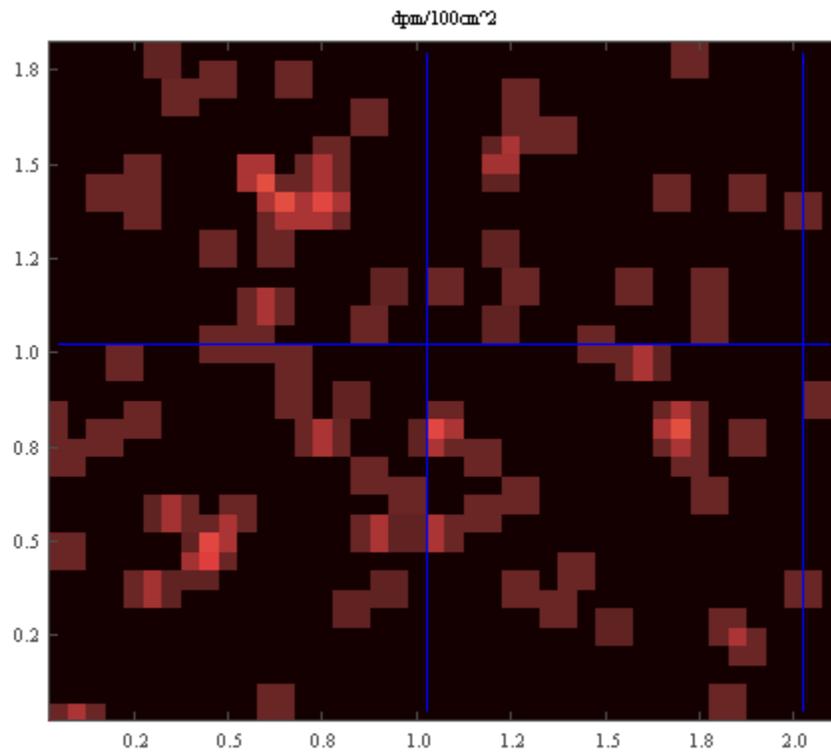


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

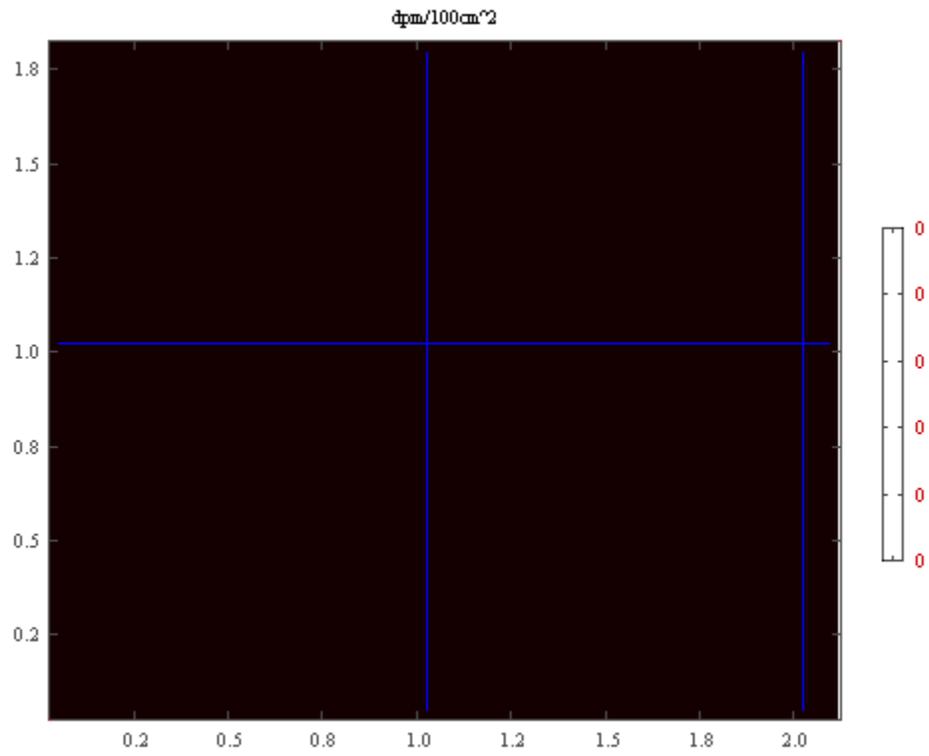


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4221C
Survey Date:	March 5, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

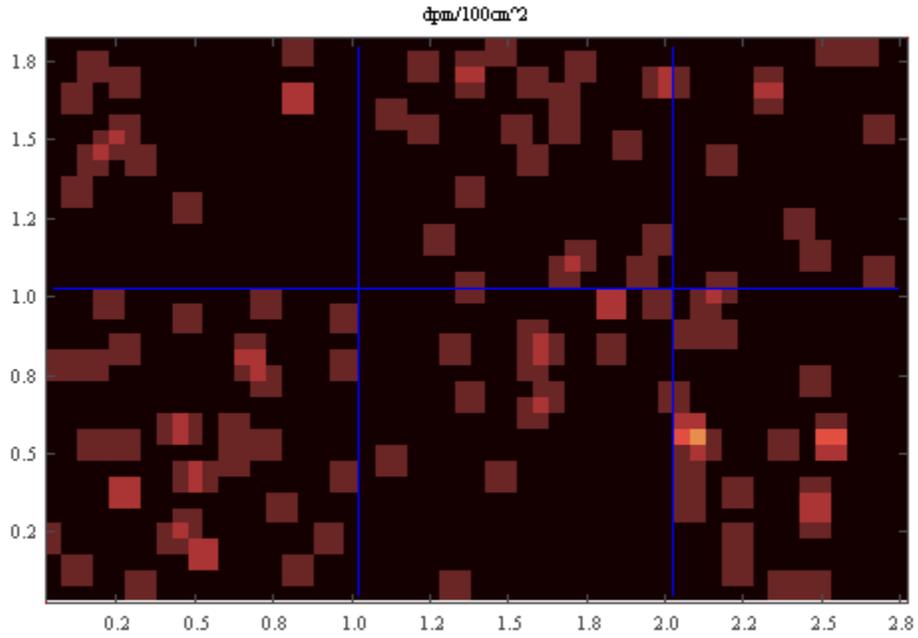


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

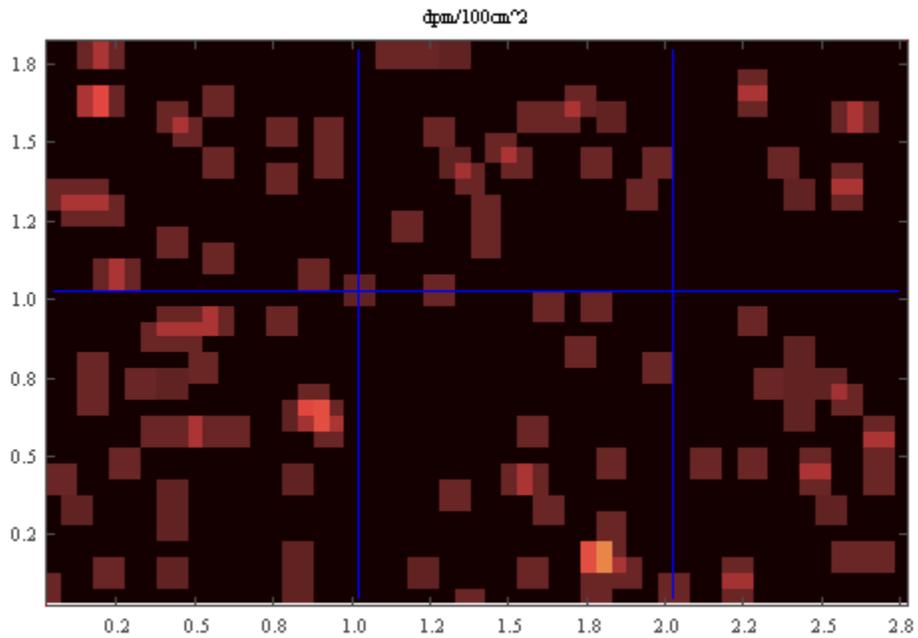


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

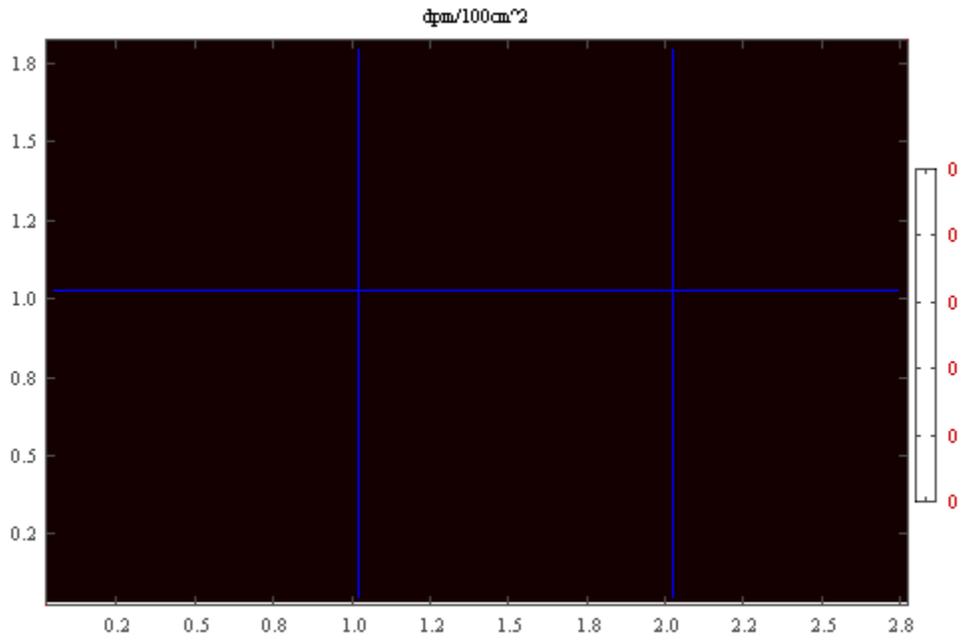


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4231A
Survey Date:	February 22, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

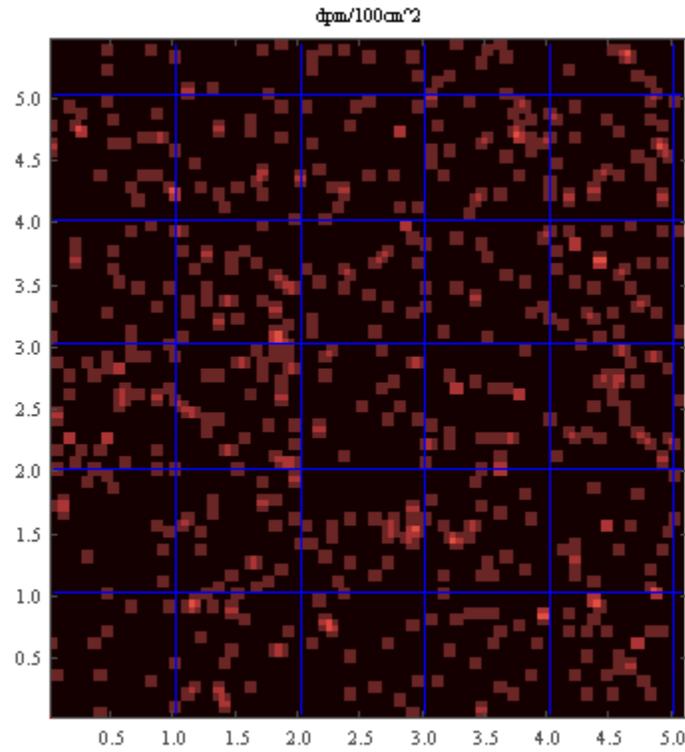


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

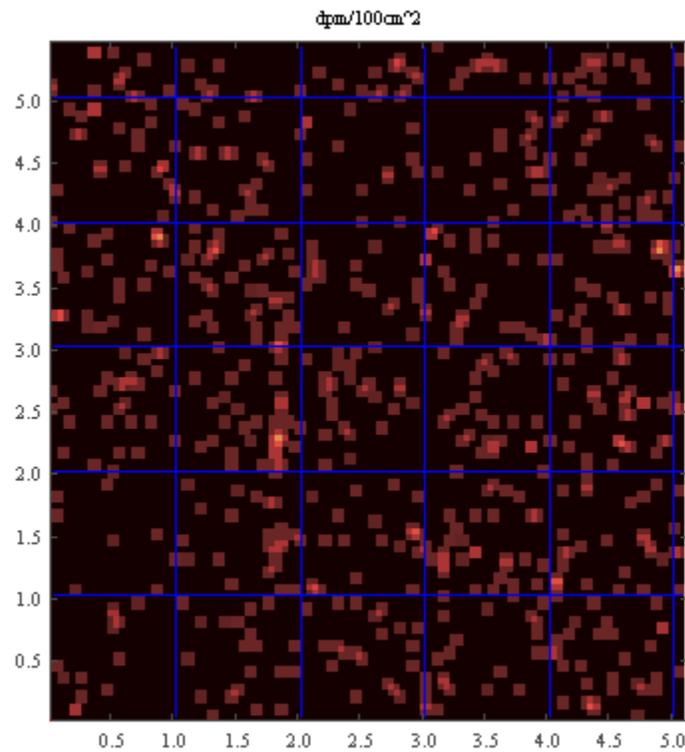


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

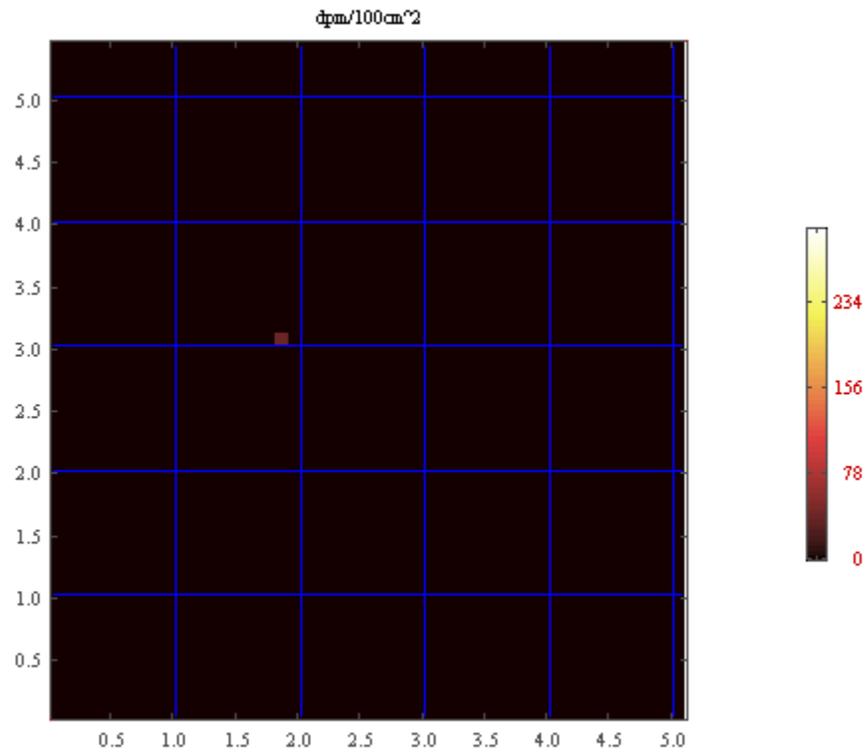


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4301A
Survey Date:	February 11, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	273 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.39 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

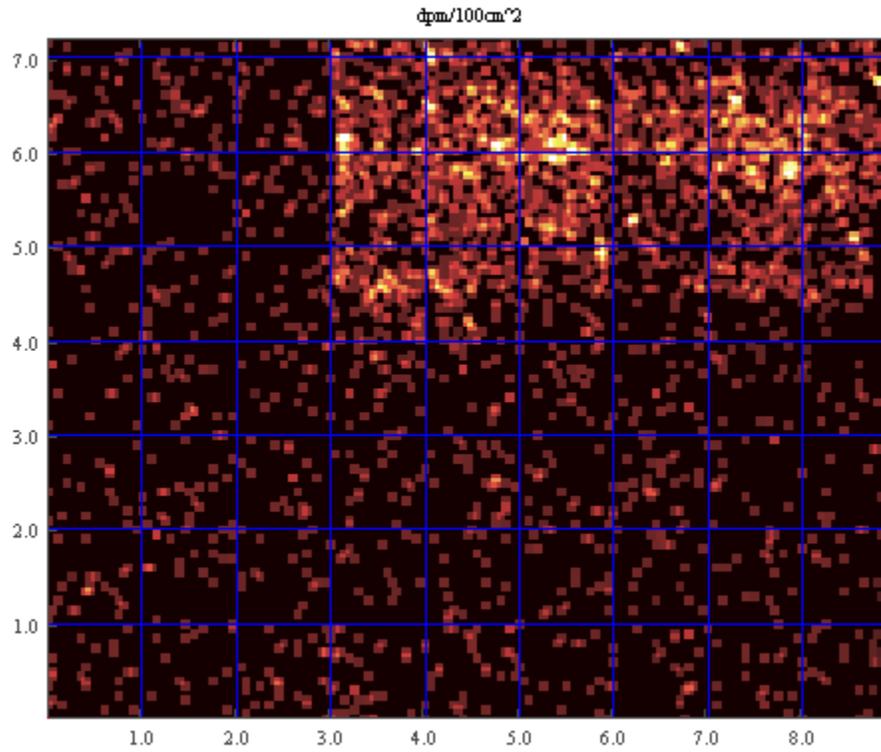


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

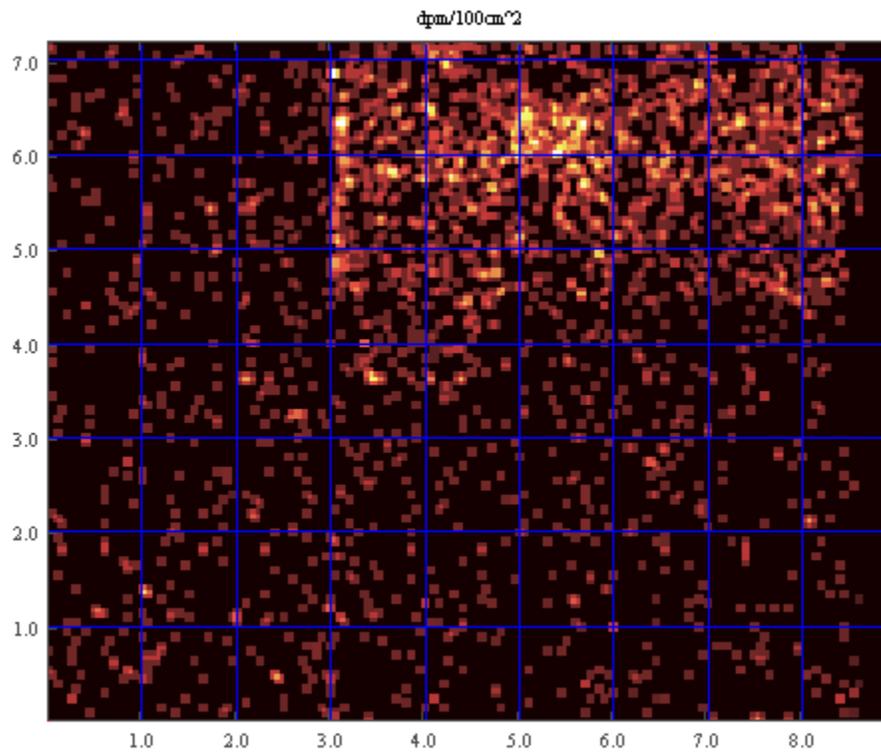


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

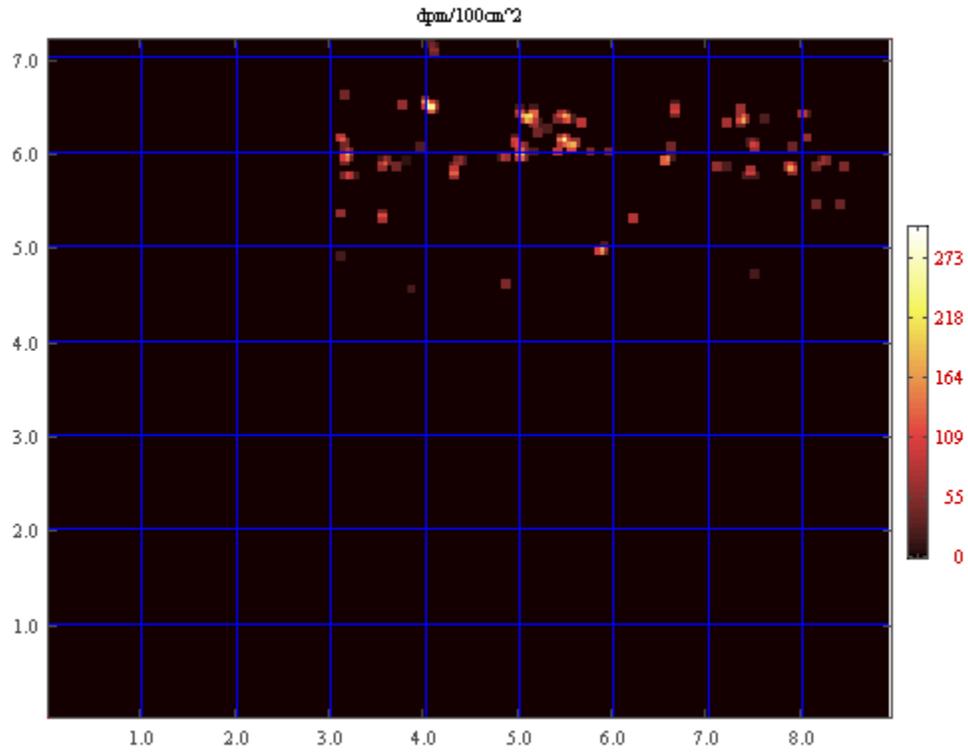


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

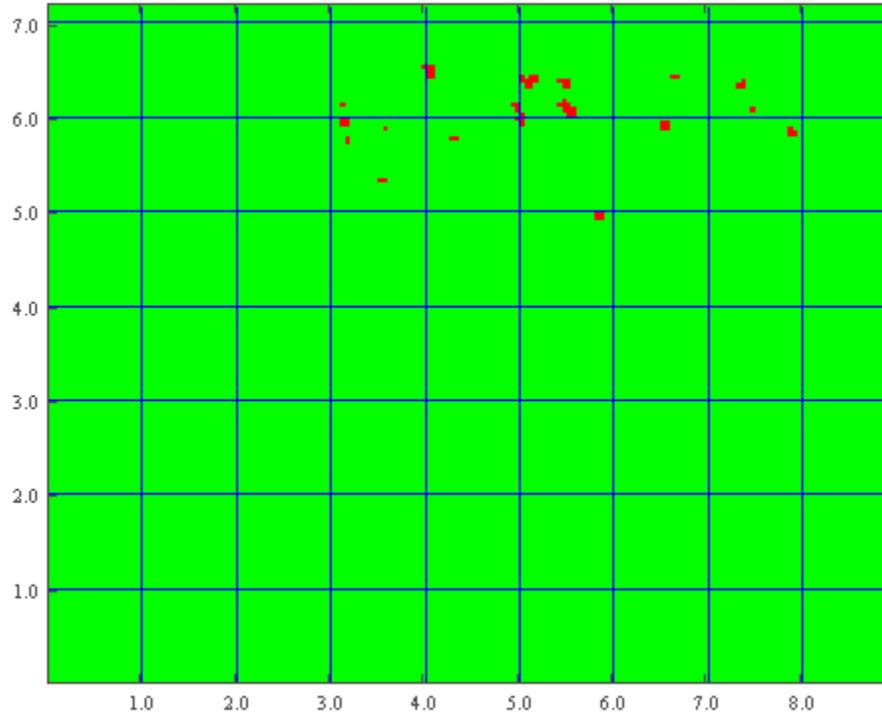


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	273	1	(405,650)	(400,105)	N/A		
Spot	253	1	(550,615)	(545,70)	N/A		
Spot	219	1	(515,640)	(510,95)	N/A		
Spot	197	1	(505,600)	(500,55)	N/A		
Spot	187	1	(320,600)	(315,55)	N/A		
Spot	187	1	(550,640)	(545,95)	N/A		
Spot	176	1	(740,635)	(735,90)	N/A		
Spot	174	2	(590,500)	(585,135)	N/A		
Spot	171	1	(790,585)	(785,40)	N/A		
Spot	153	1	(660,595)	(655,50)	N/A		
Spot	131	1	(430,580)	(425,35)	N/A		
Spot	126	1	(315,615)	(310,70)	N/A		
Spot	124	1	(360,590)	(355,45)	N/A		
Spot	115	2	(355,535)	(350,170)	N/A		
Spot	107	1	(495,615)	(490,70)	N/A		
Spot	106	1	(320,575)	(315,30)	N/A		
Spot	104	1	(665,645)	(660,100)	N/A		
Spot	103	1	(750,610)	(745,65)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4301B
Survey Date:	February 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	234 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.10 m ²

This survey is not position correlated.

Primary Detector:

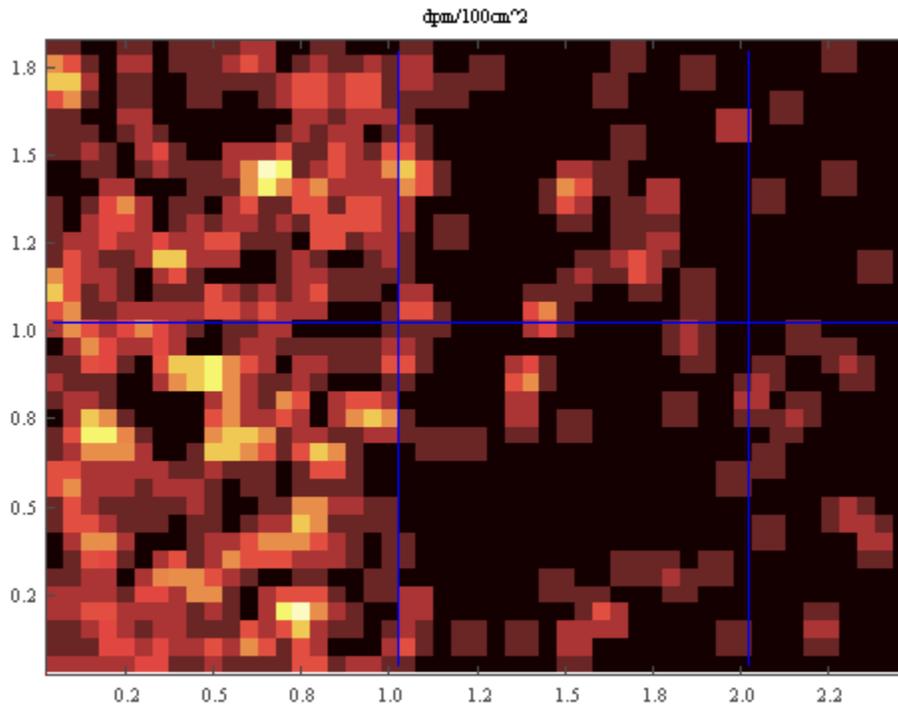


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

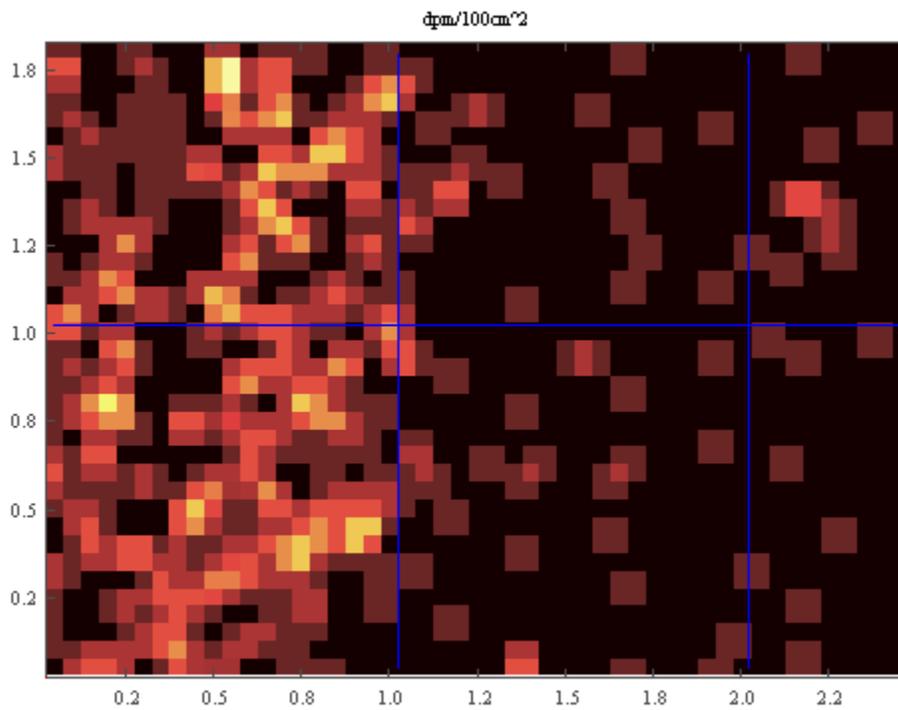


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

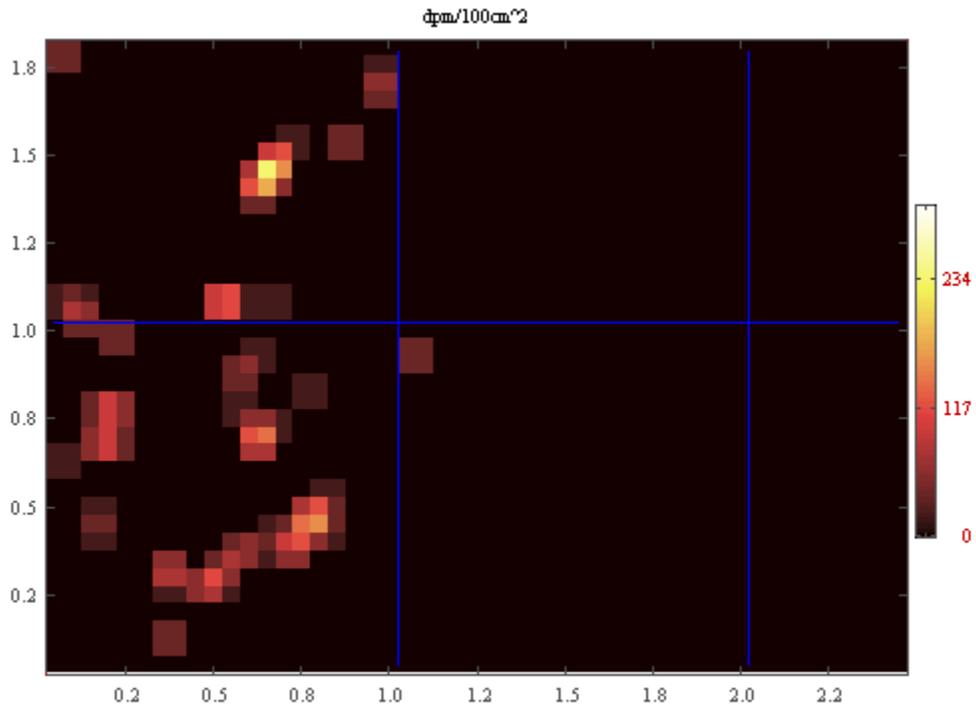


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

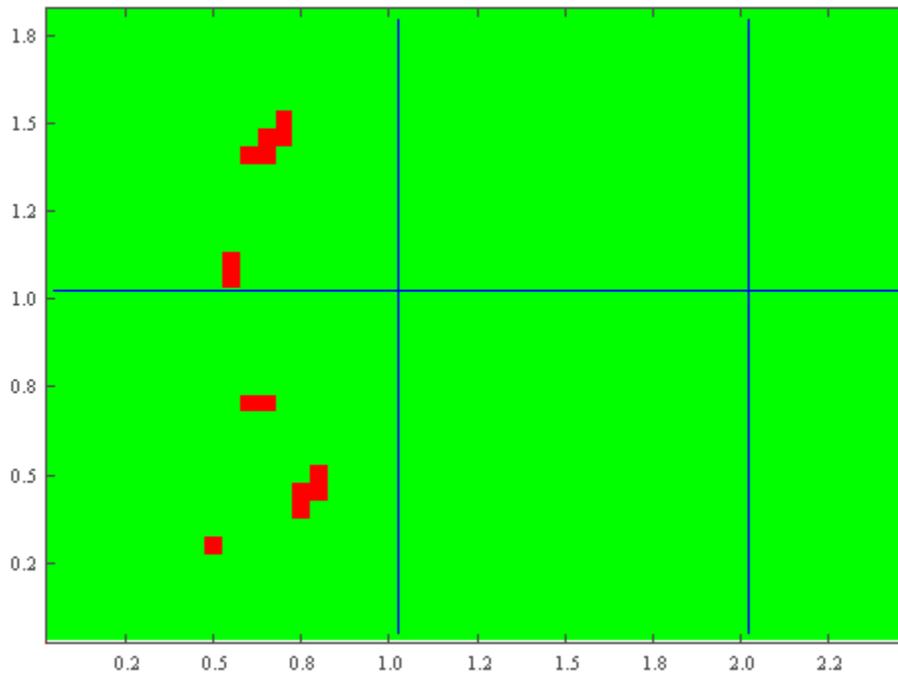


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	234	14	(65,145)	(0,140)	N/A		
Spot	156	16	(80,45)	(5,40)	N/A		
Spot	137	14	(65,70)	(0,65)	N/A		
Spot	114	10	(50,30)	(5,25)	N/A		
Spot	112	12	(55,105)	(0,100)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4311A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

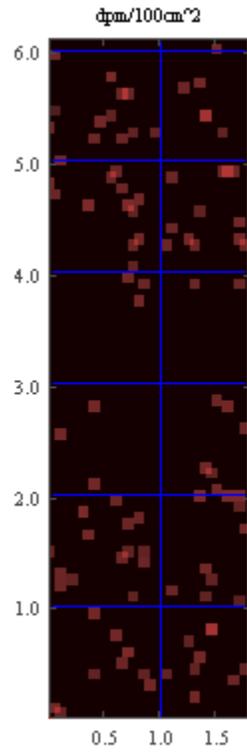


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

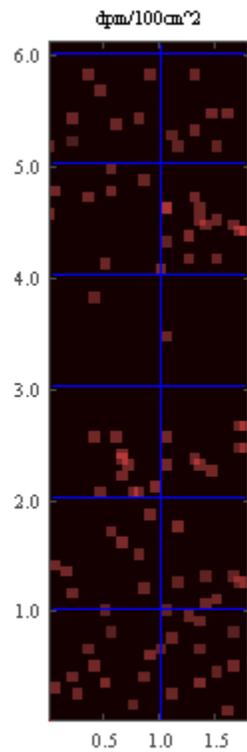


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

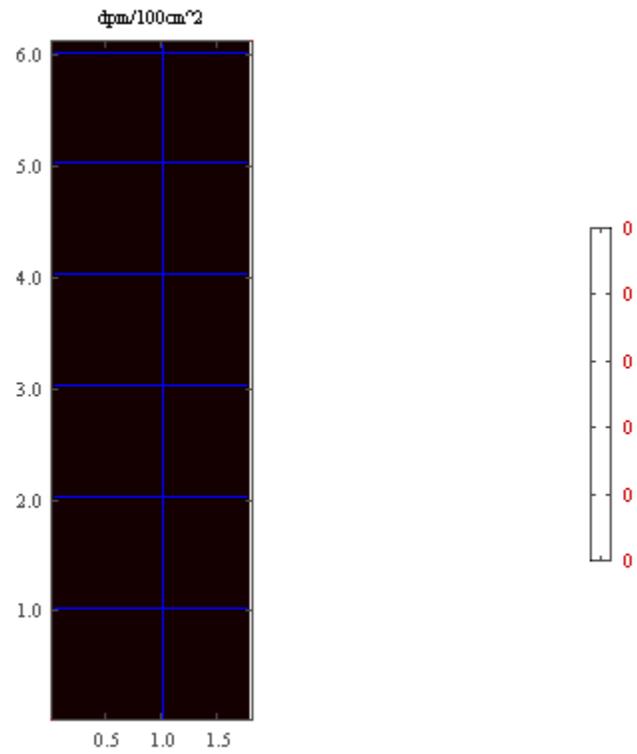


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4311B
Survey Date:	February 9, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

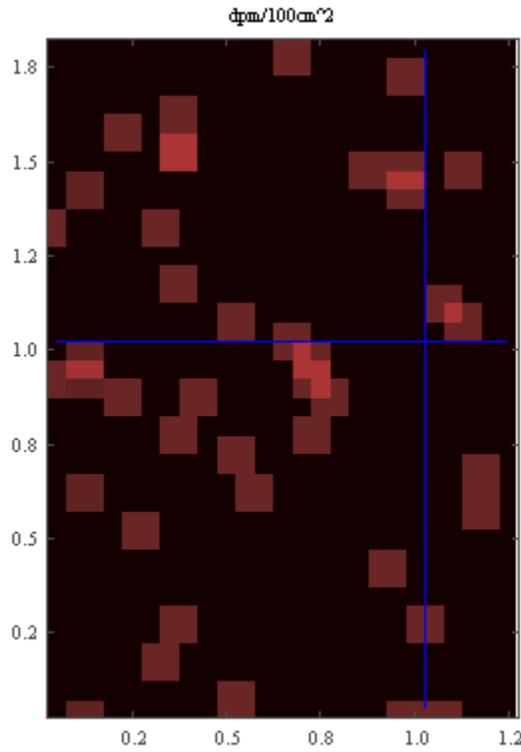


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

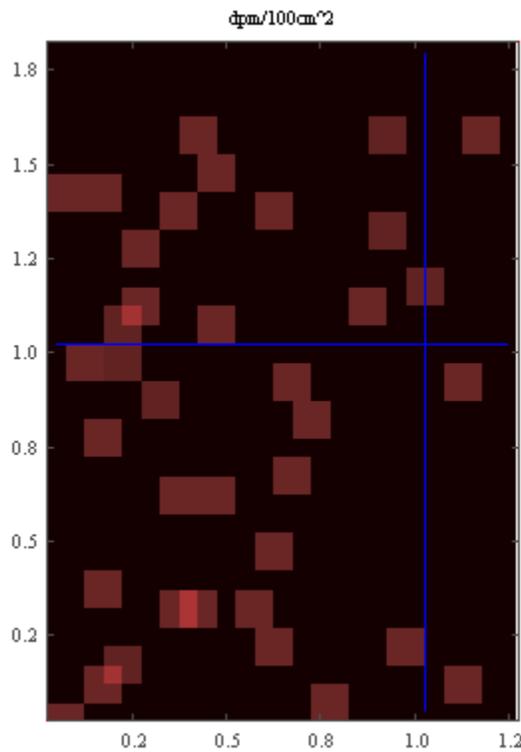


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

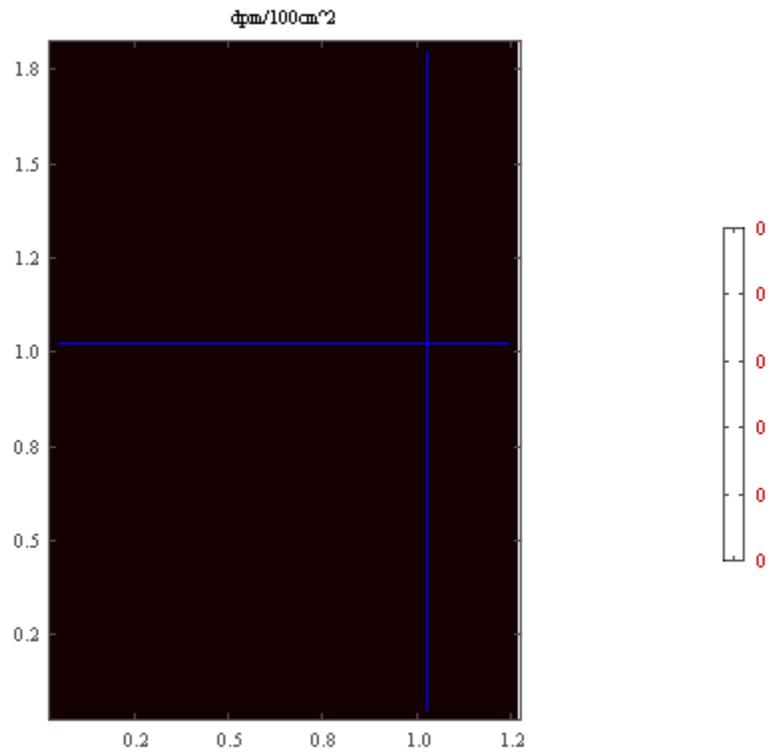


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4311C
Survey Date:	February 22, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

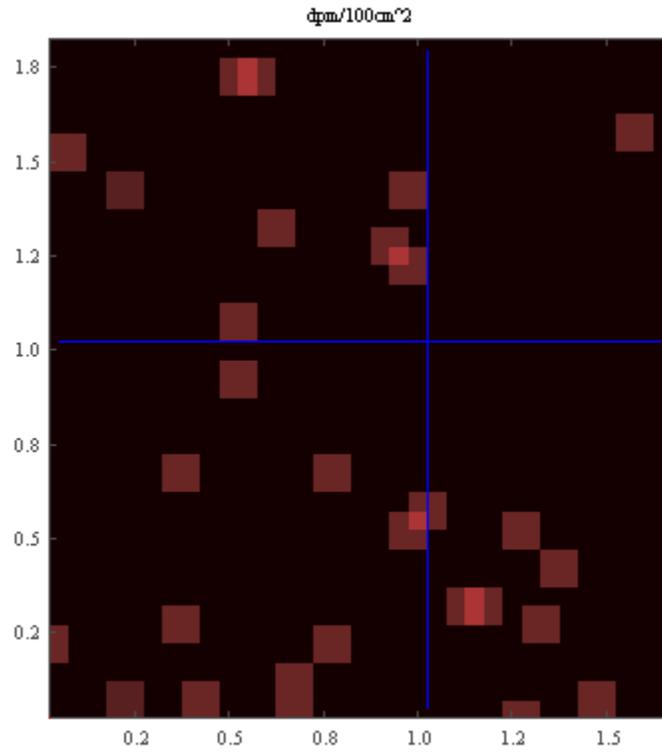


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

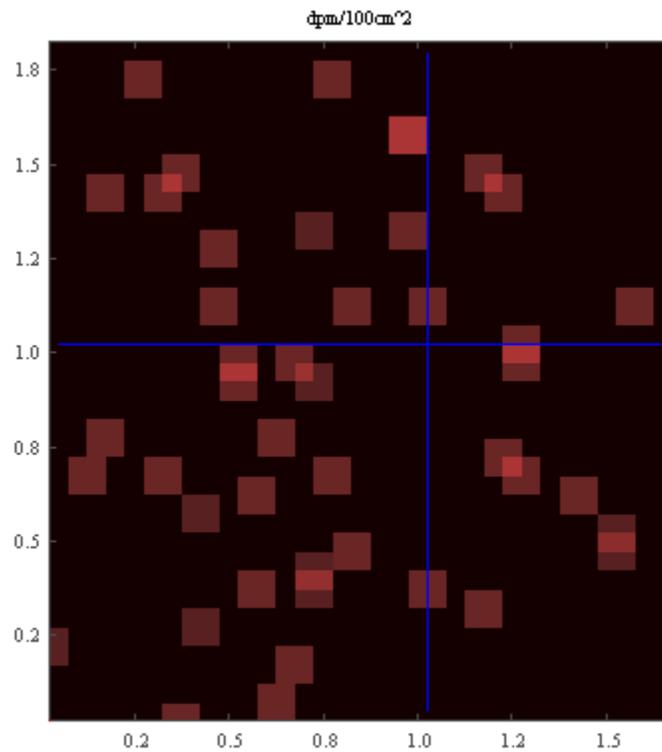


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

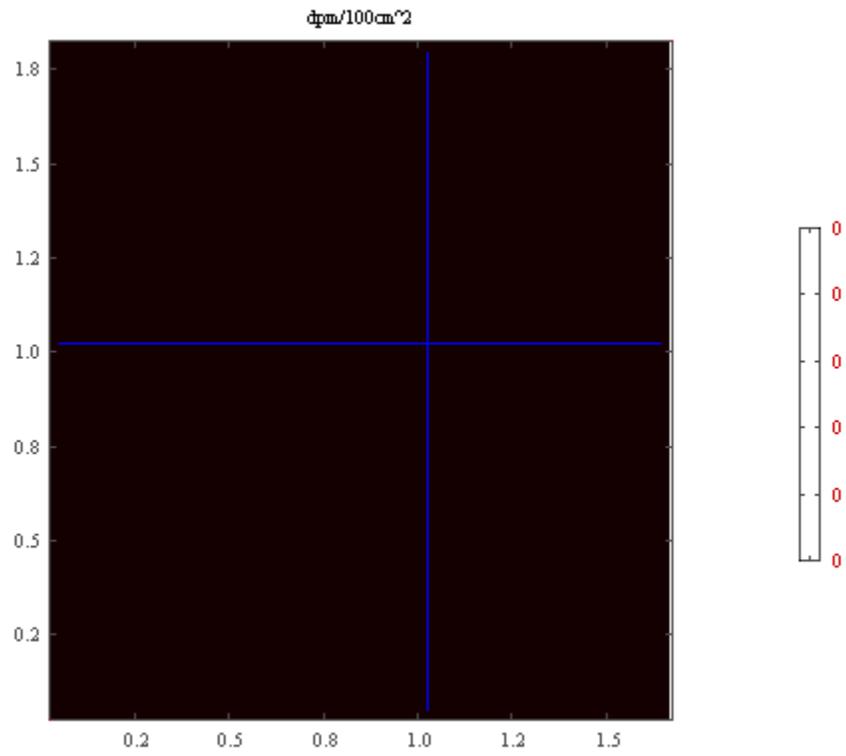


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4321A
Survey Date:	February 22, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

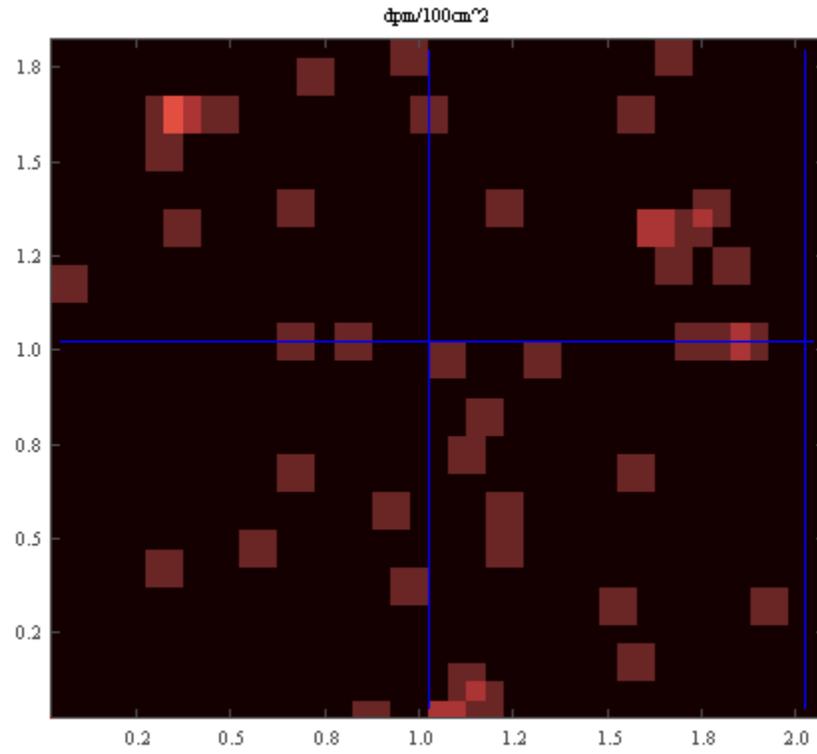


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

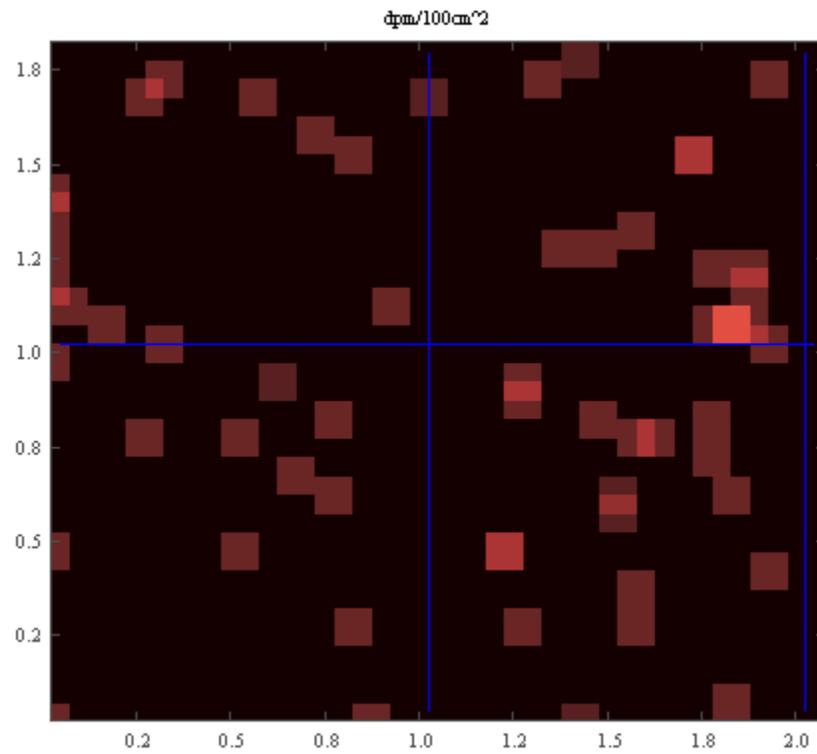


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

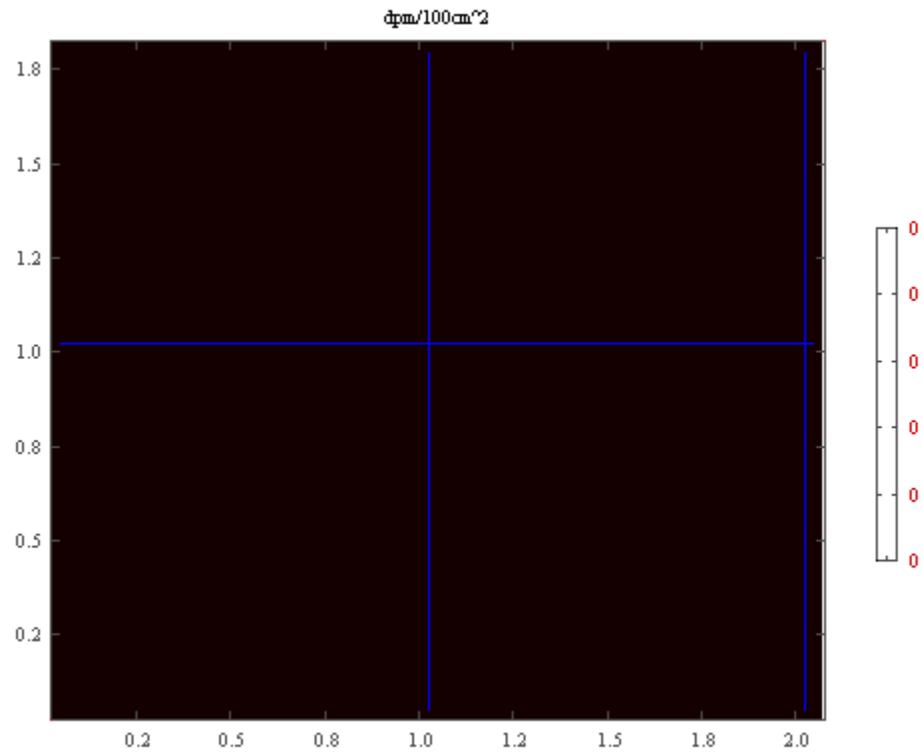


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4331A
Survey Date:	February 28, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

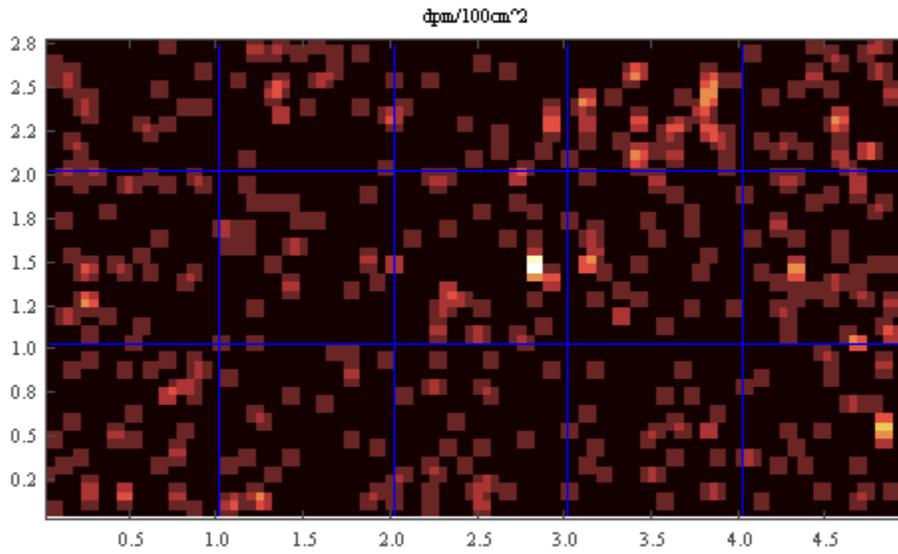


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

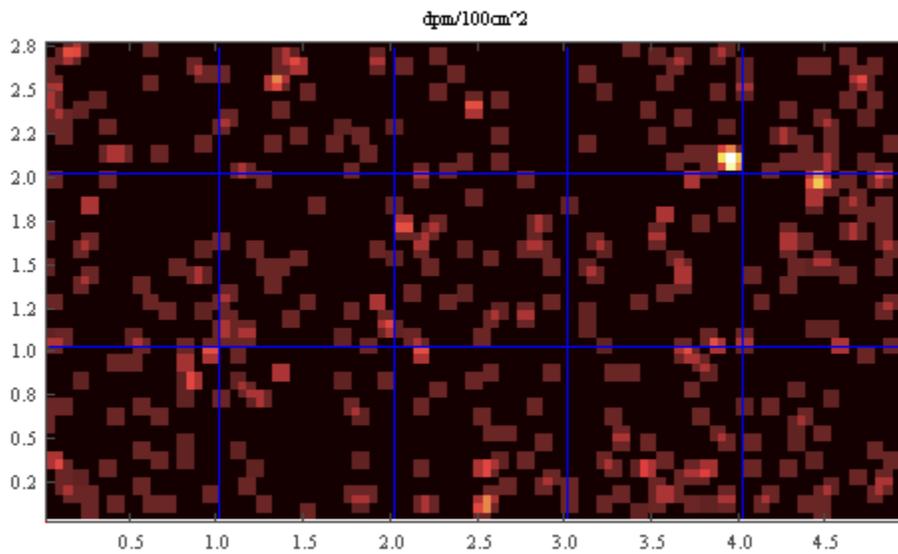


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

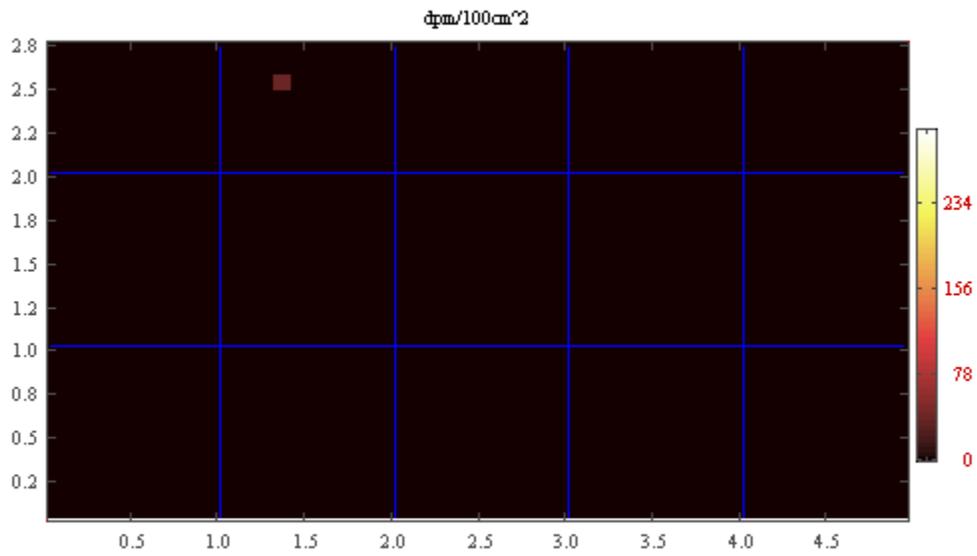


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4401A
Survey Date:	February 8, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	420 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.08 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

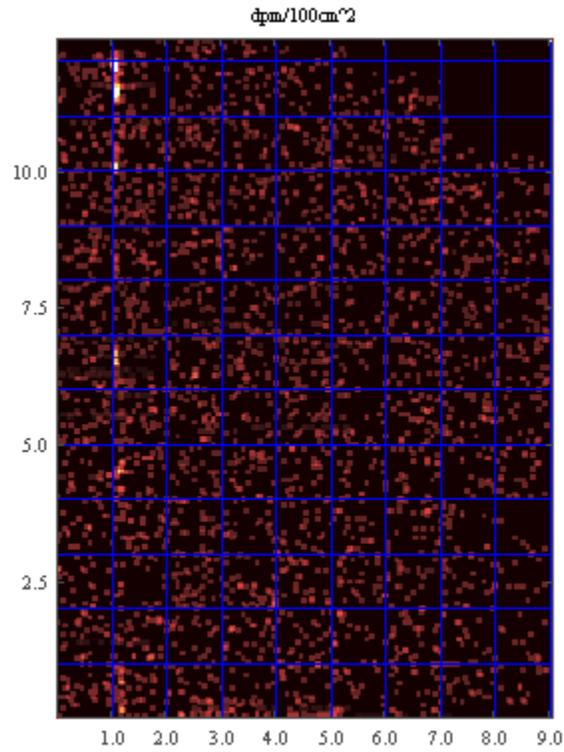


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

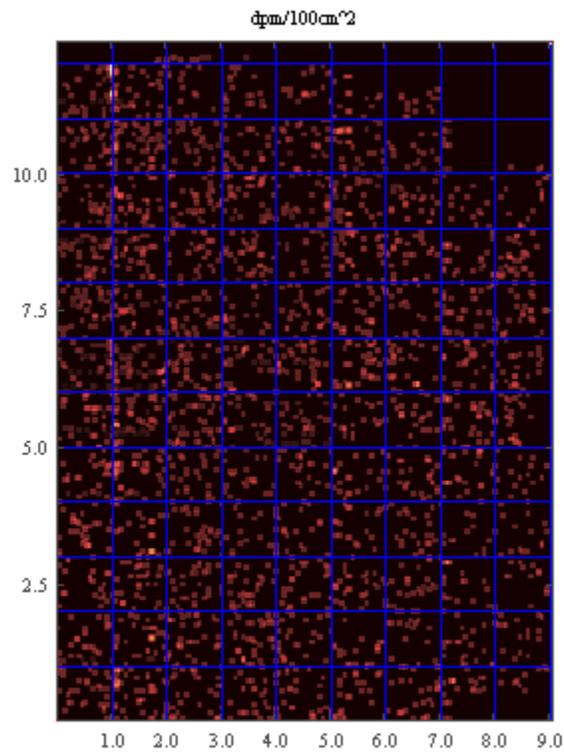


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

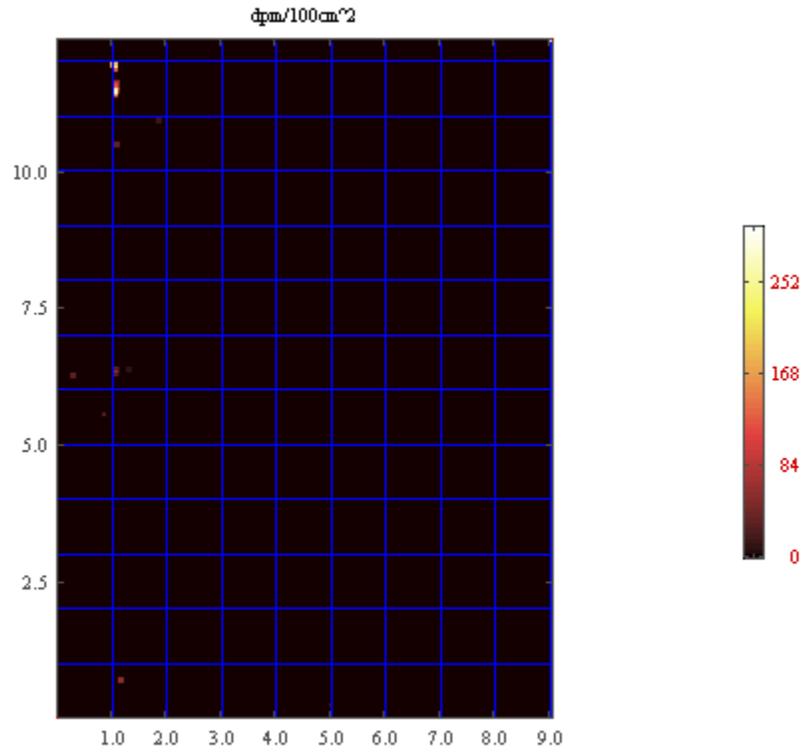


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

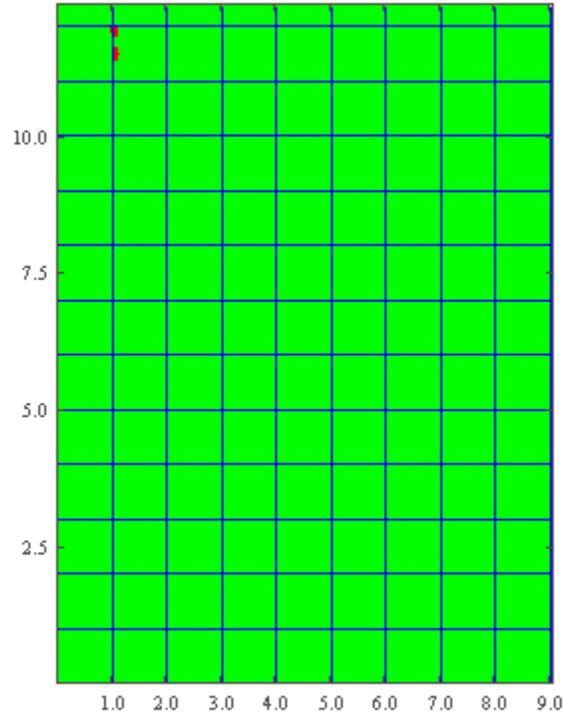


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	420	1	(105,1190)	(100,1185)	N/A		
Spot	276	1	(110,1145)	(105,1140)	N/A		
Spot	107	1	(110,1160)	(105,1155)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4401B
Survey Date:	February 8, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	371 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.05 m ²

This survey is not position correlated.

Primary Detector:

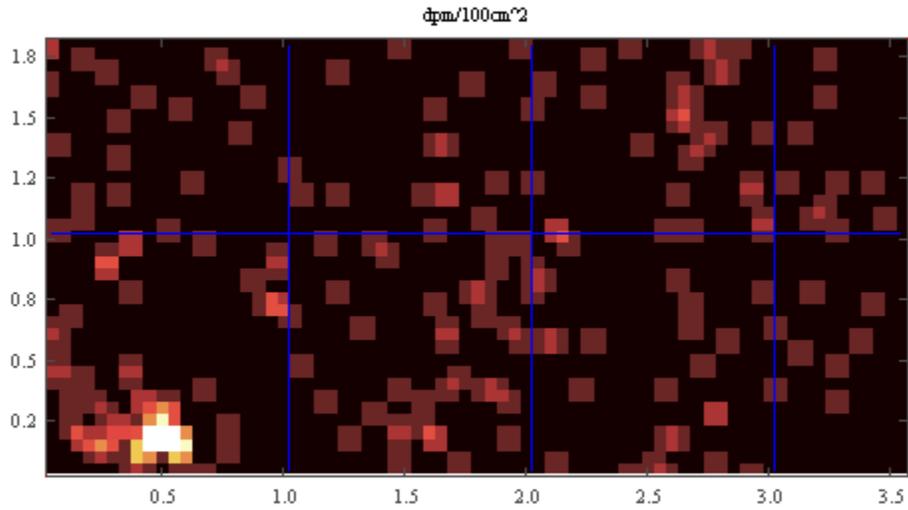


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

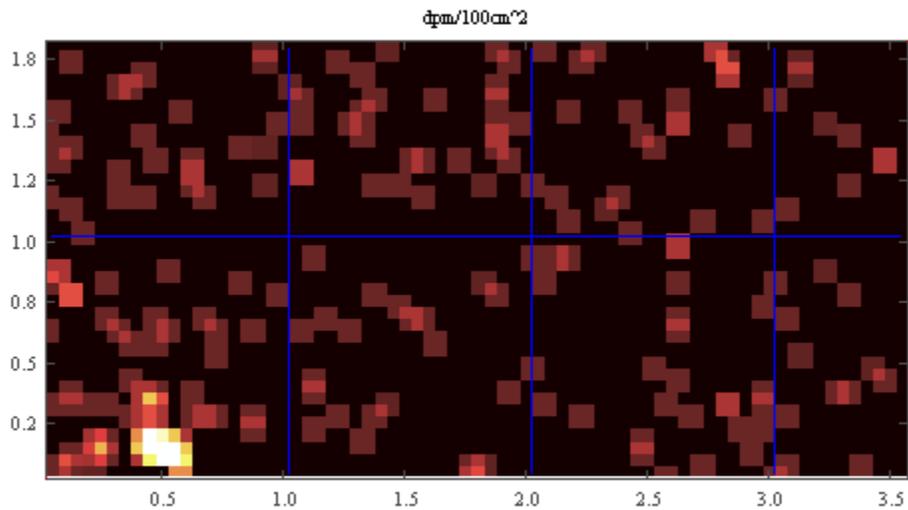


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

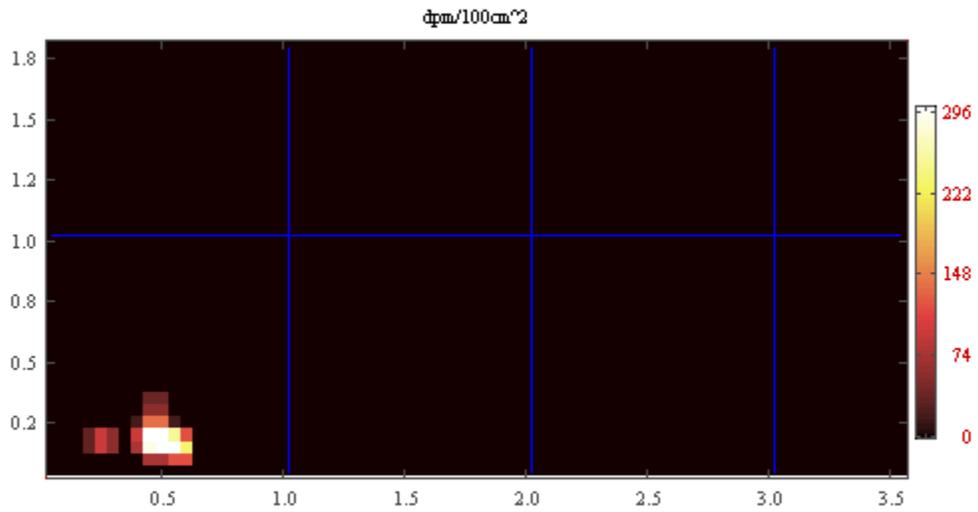


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

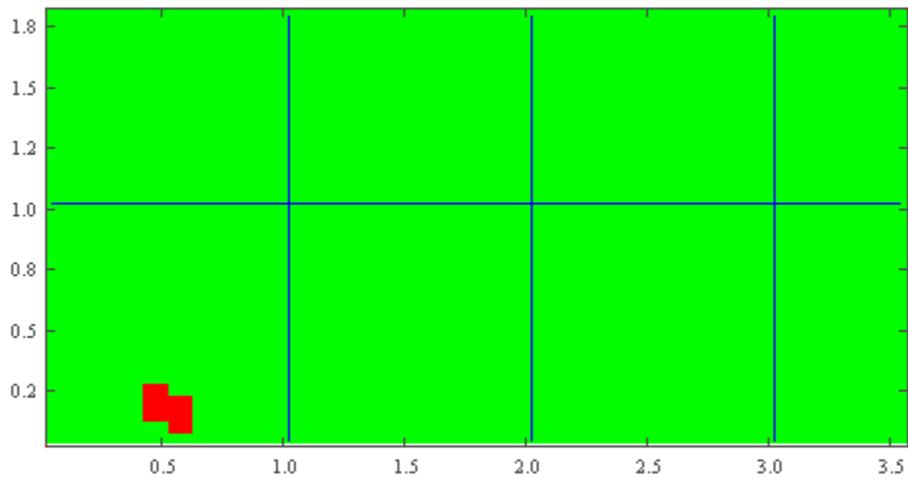


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	371	10	(50,20)	(5,15)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4411A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

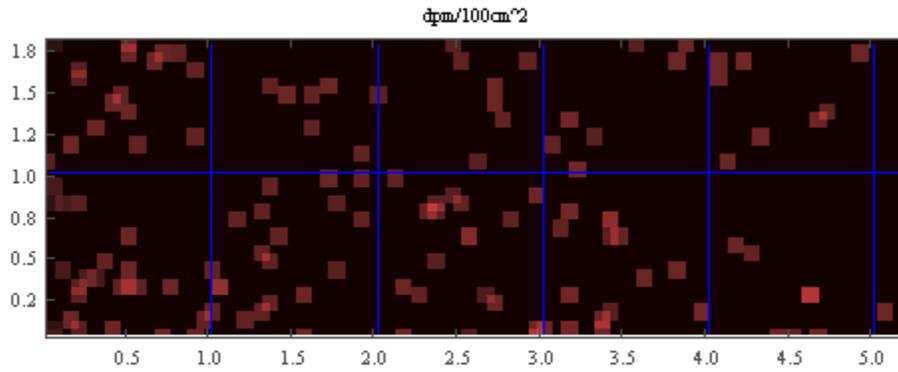


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

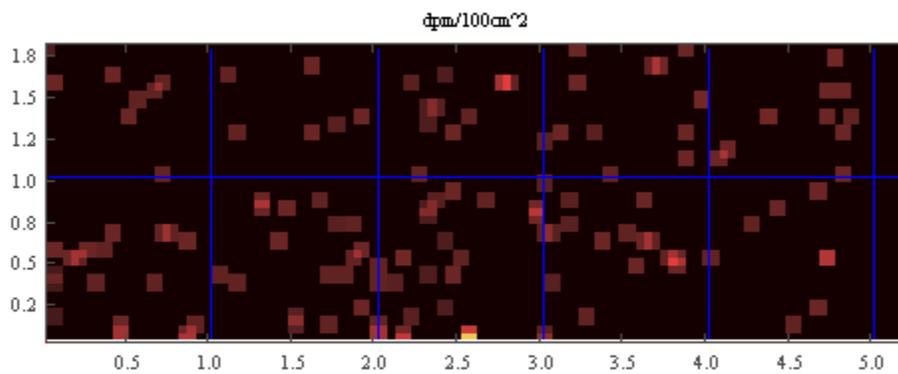


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

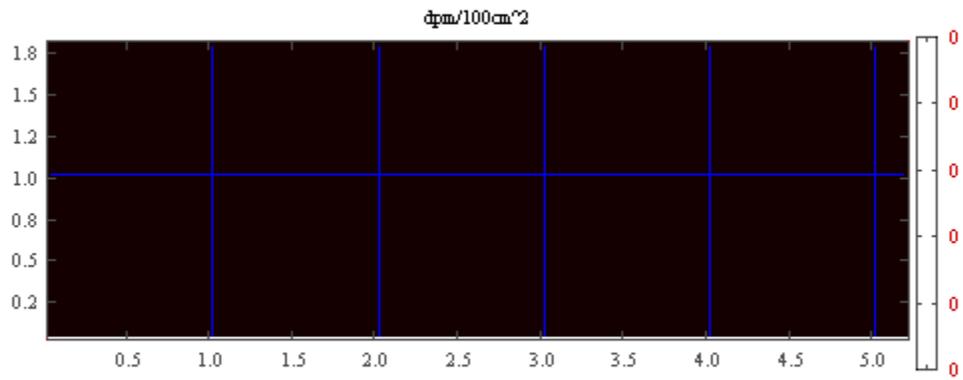


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4411B
Survey Date:	February 8, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

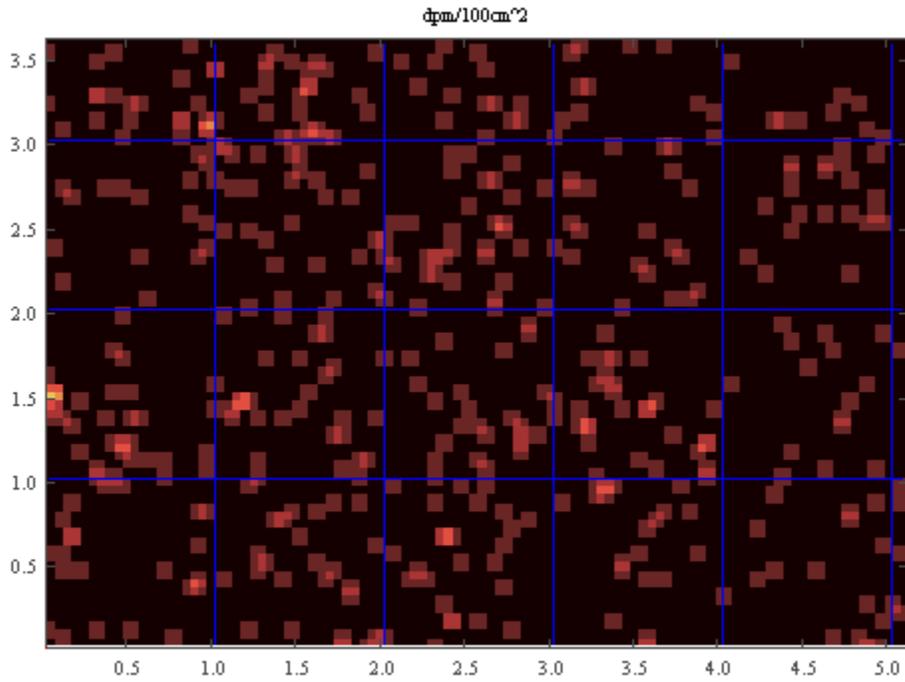


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

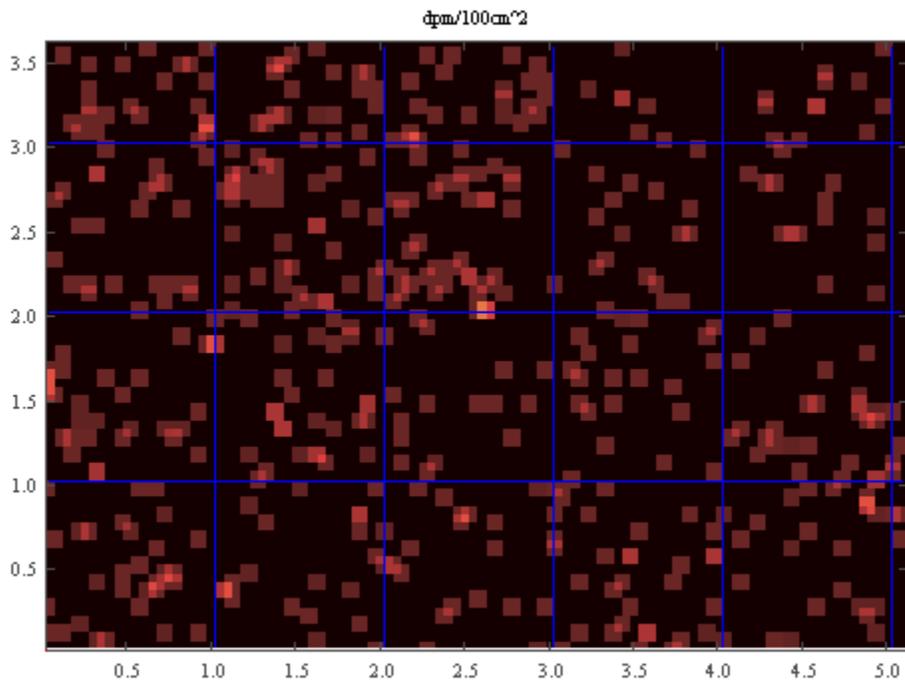


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

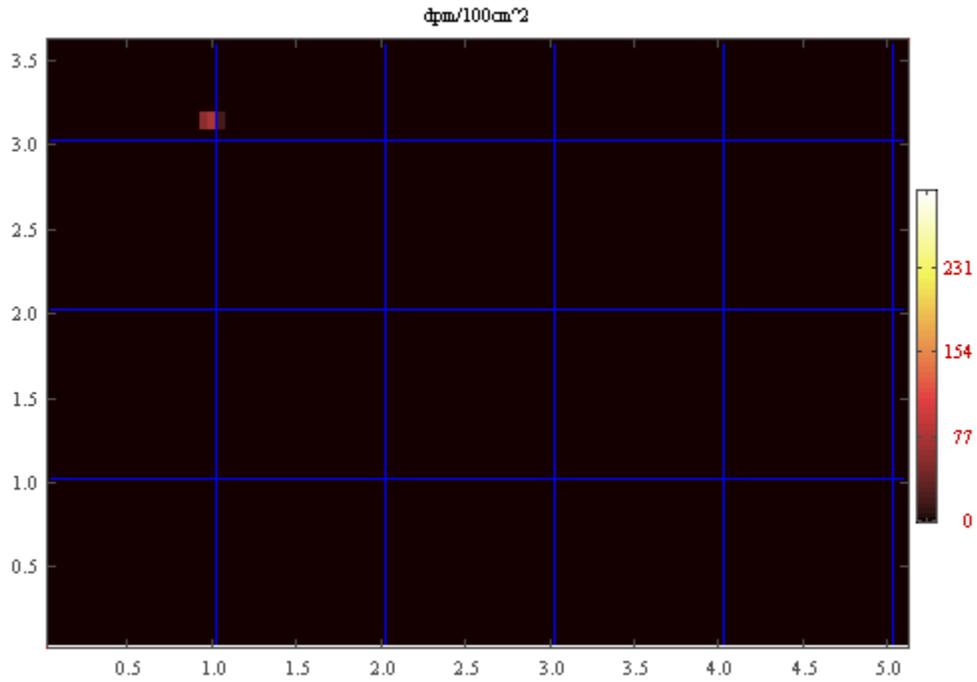


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4421A
Survey Date:	February 22, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

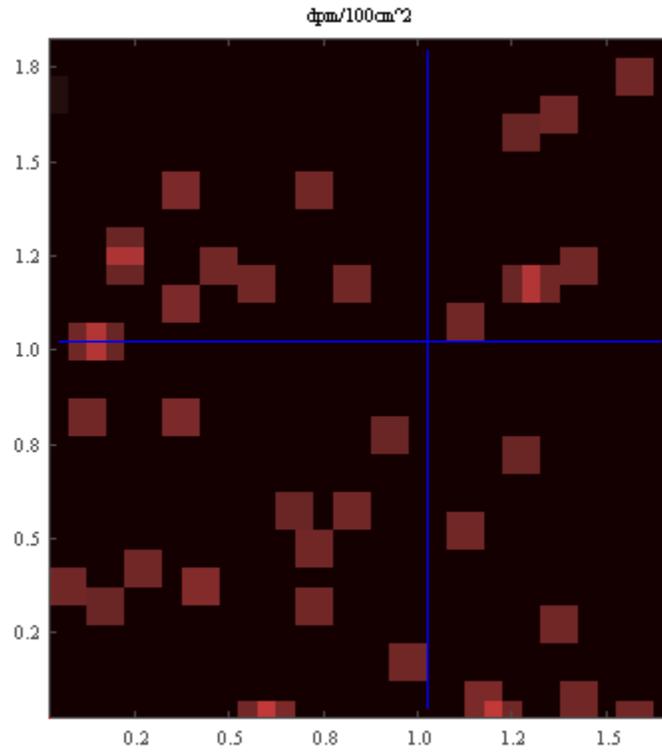


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

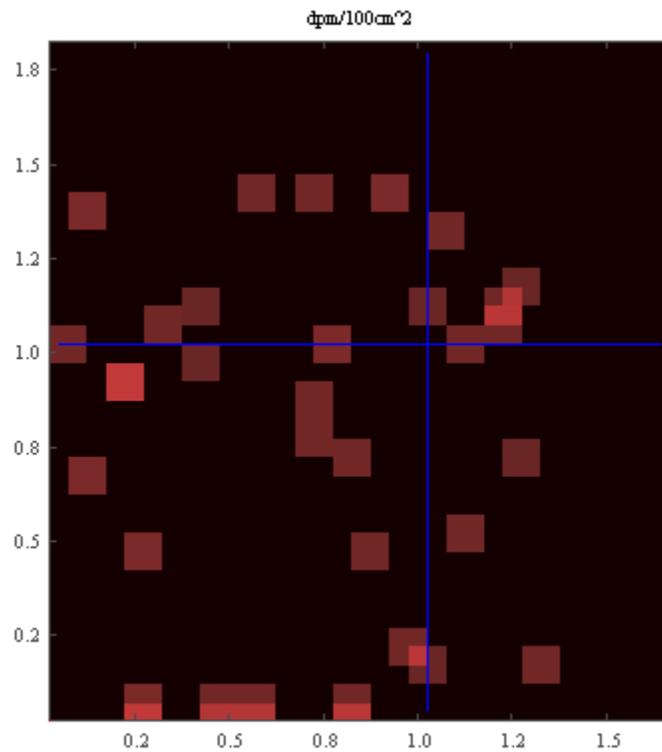


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

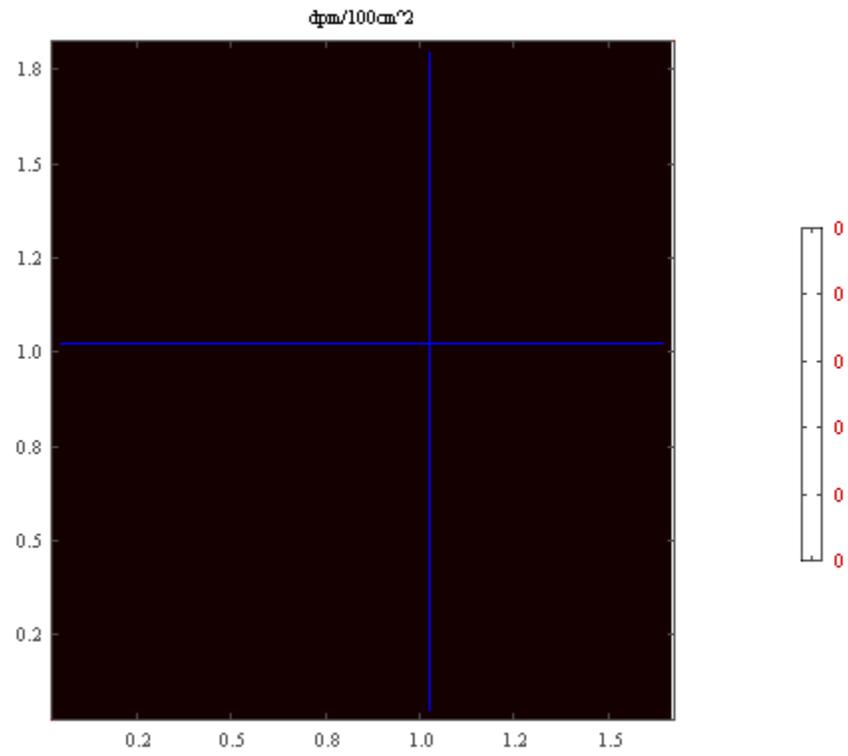


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4431A
Survey Date:	February 25, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	527 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.03 m ²

This survey is not position correlated.

Primary Detector:

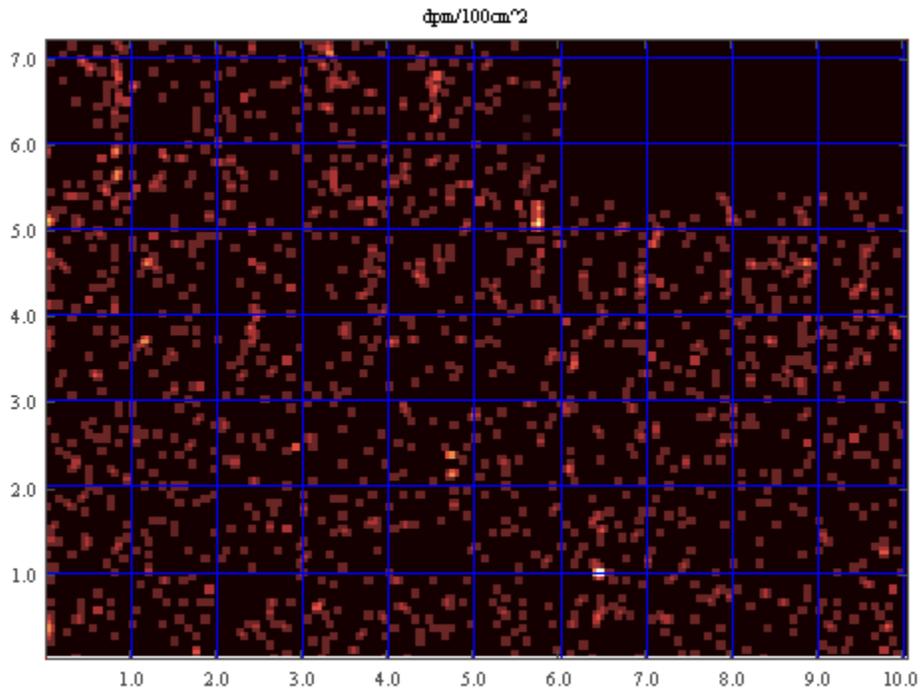


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

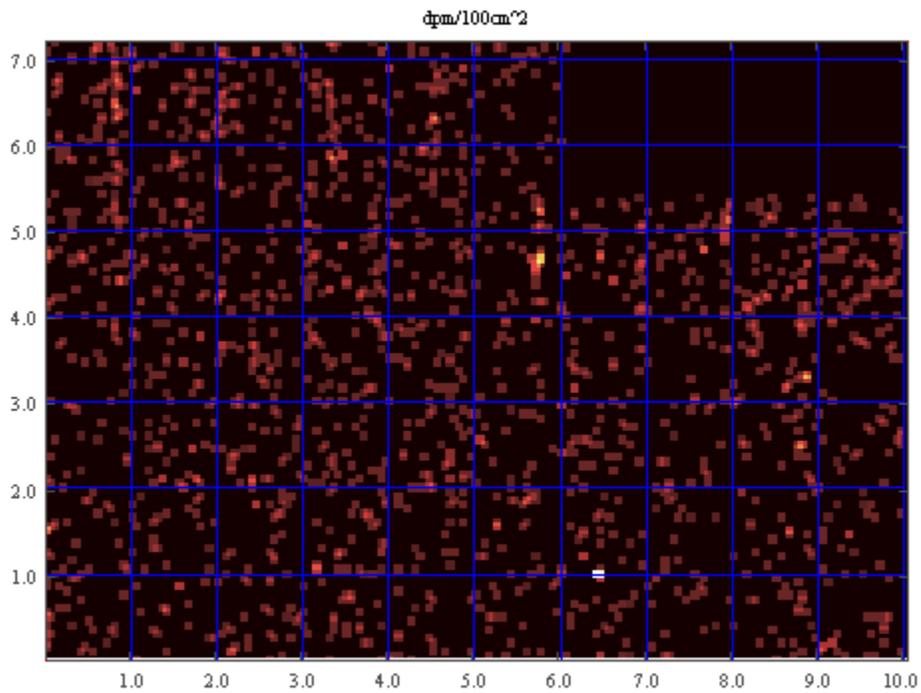


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

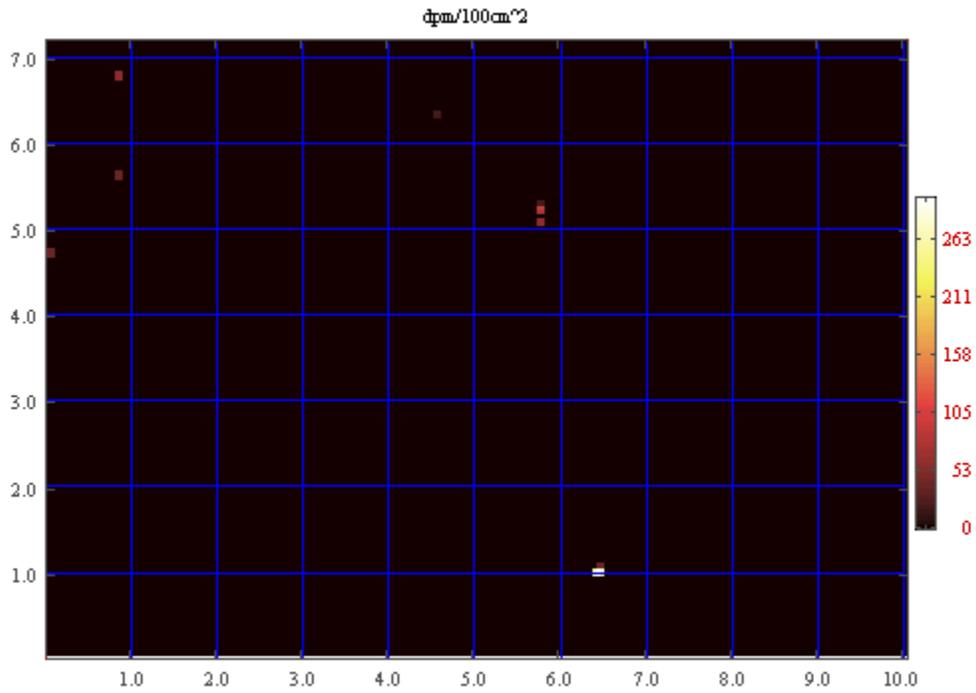


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

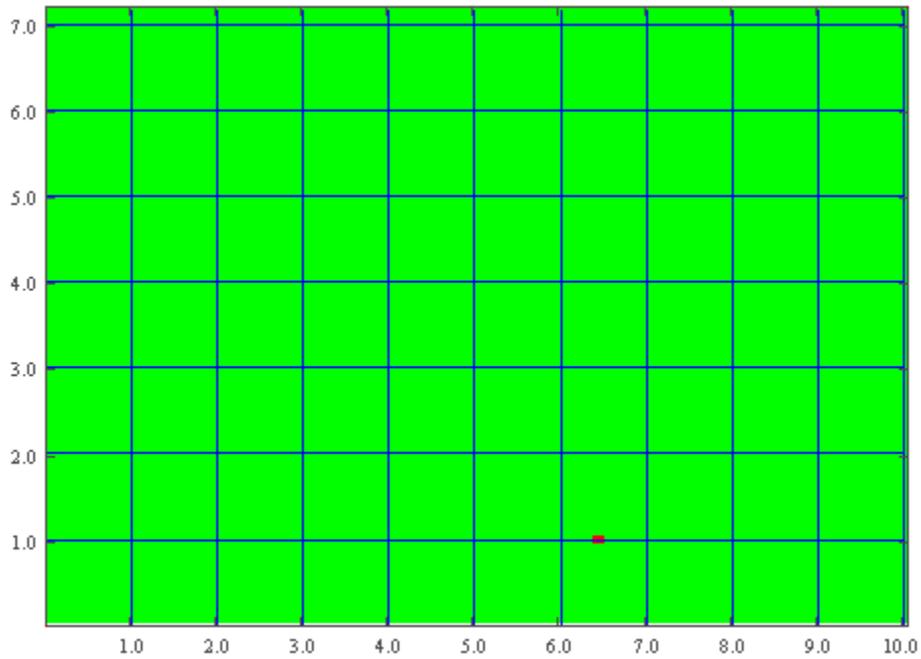


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	527	130	(645,105)	(0,100)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4431B
Survey Date:	February 25, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

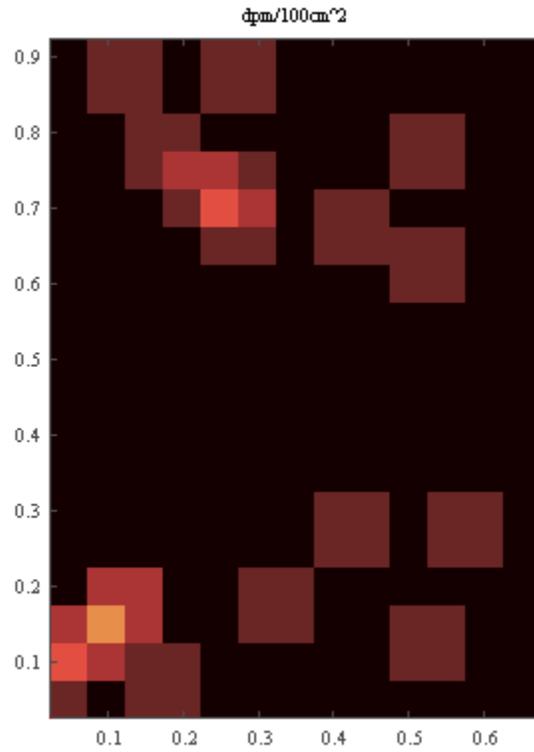


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

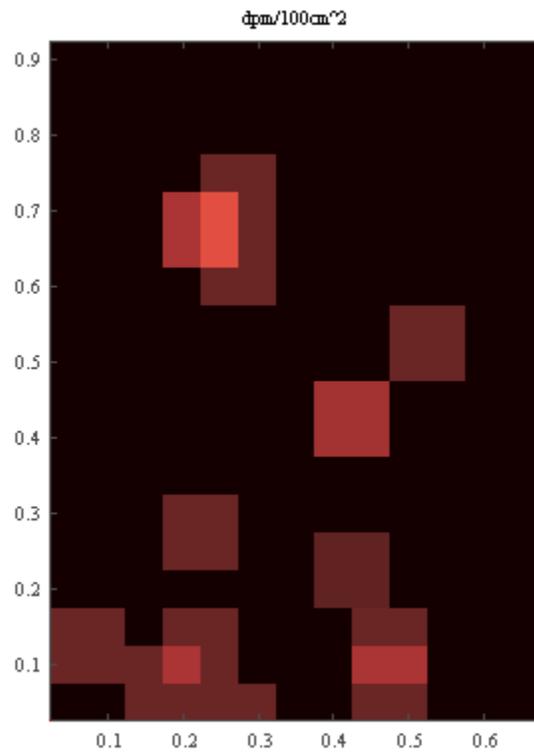


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

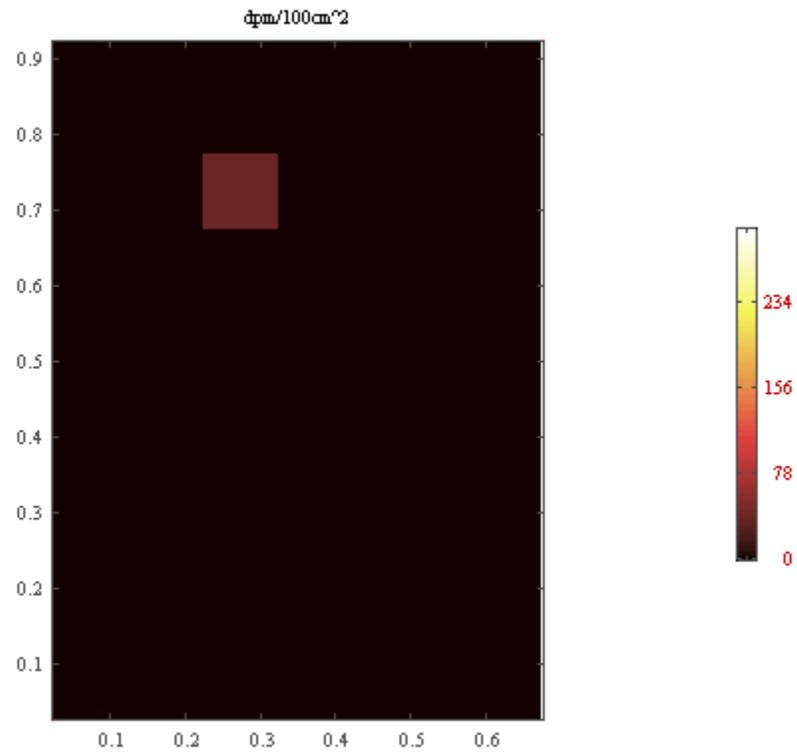


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4501A
Survey Date:	February 10, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

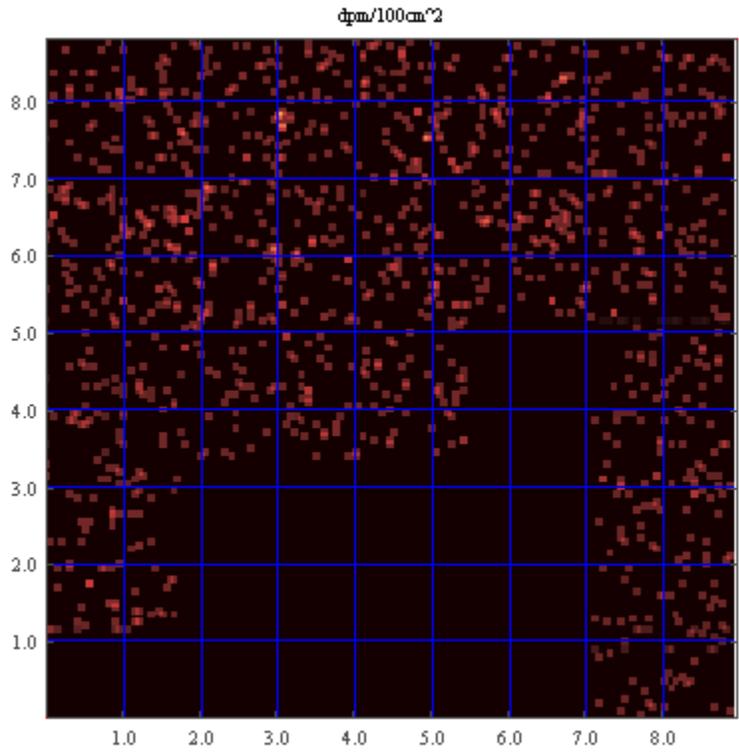


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

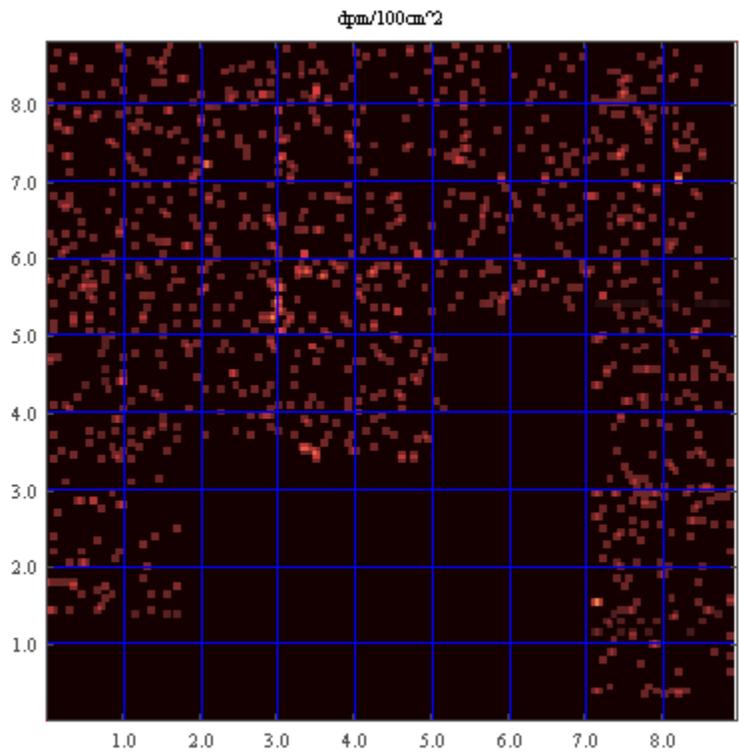


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

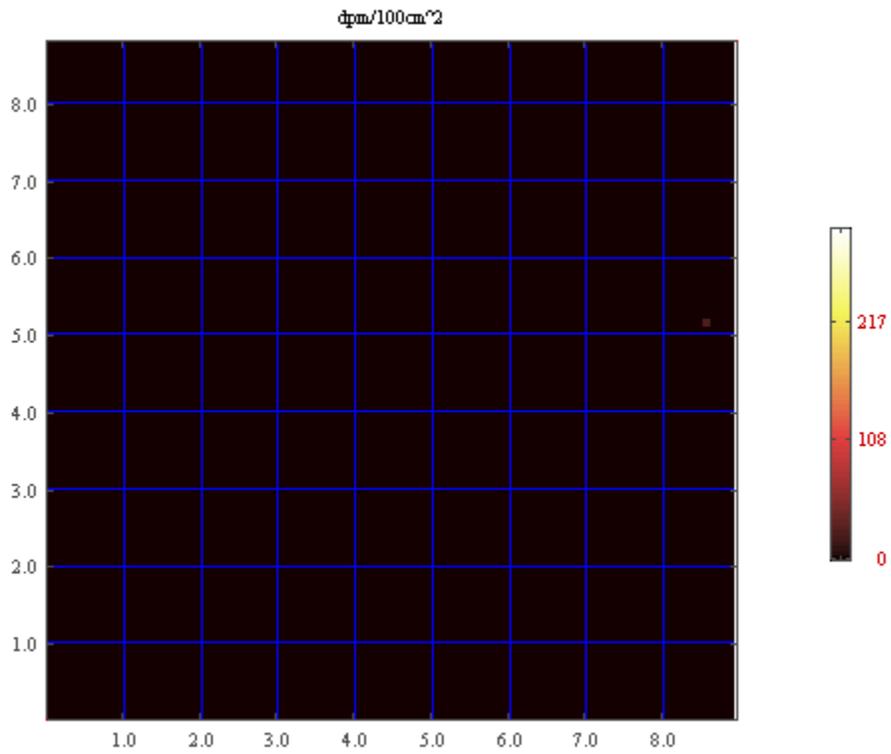


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4501B
Survey Date:	February 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

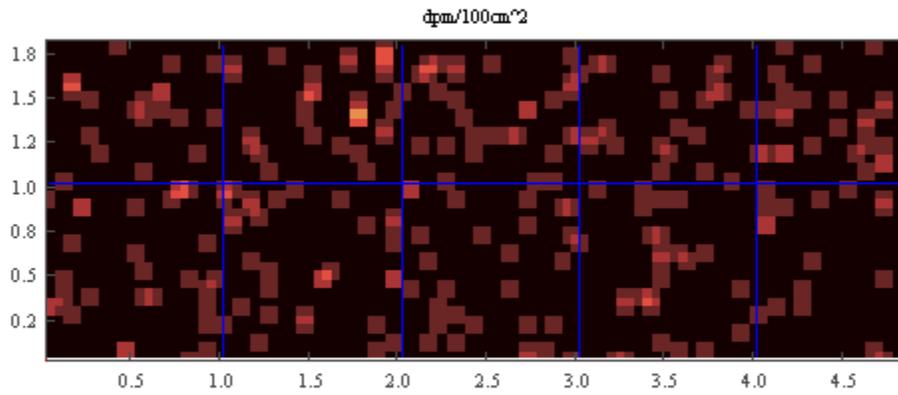


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

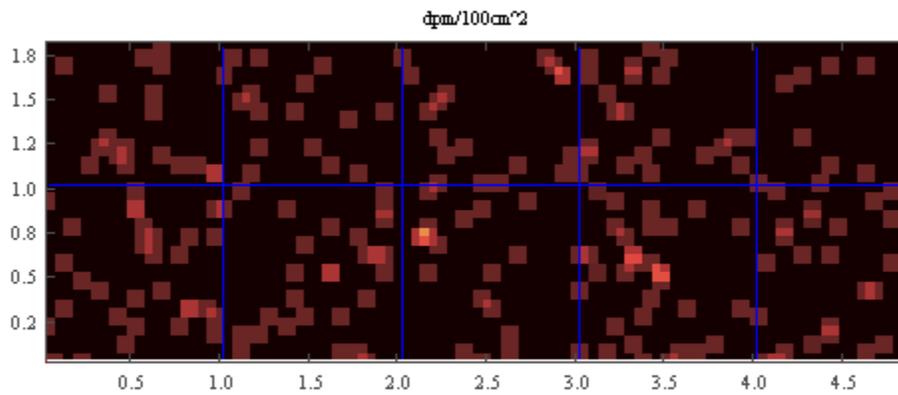


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

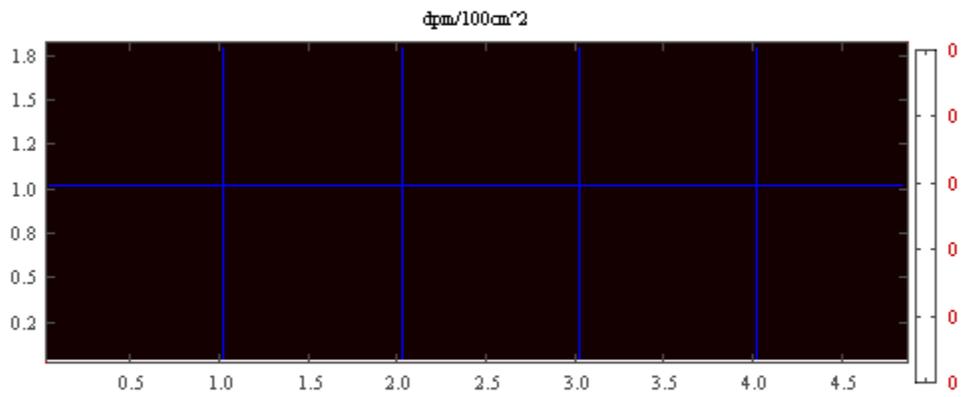


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4511A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

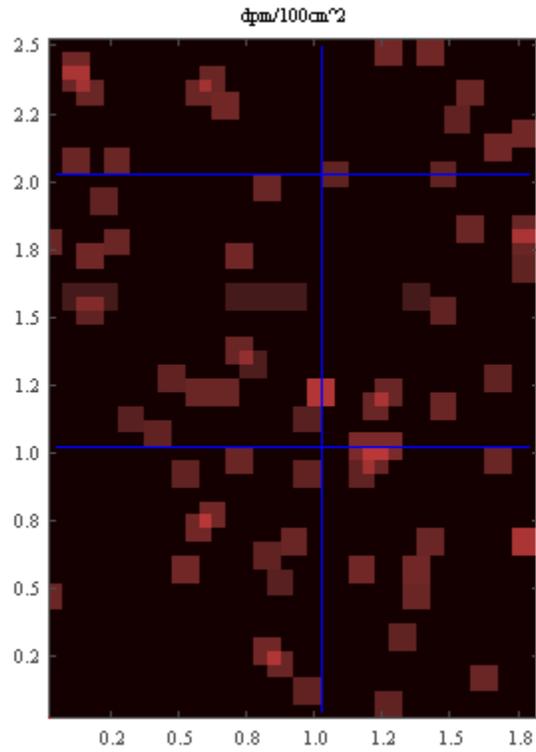


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

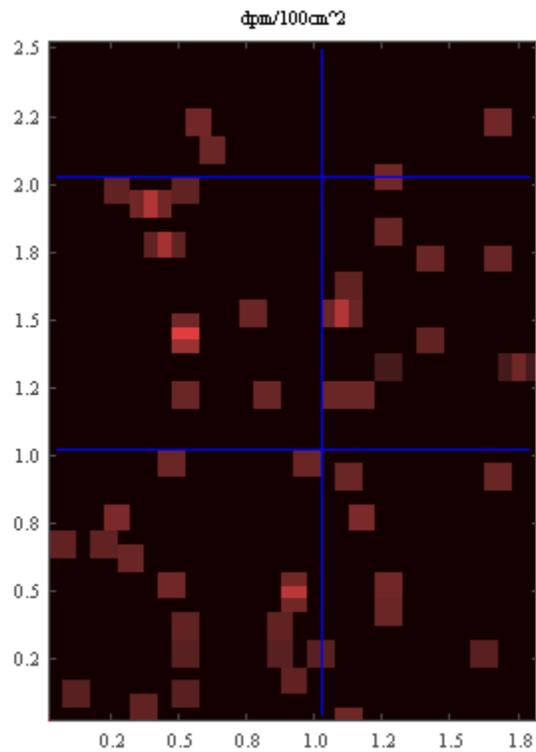


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

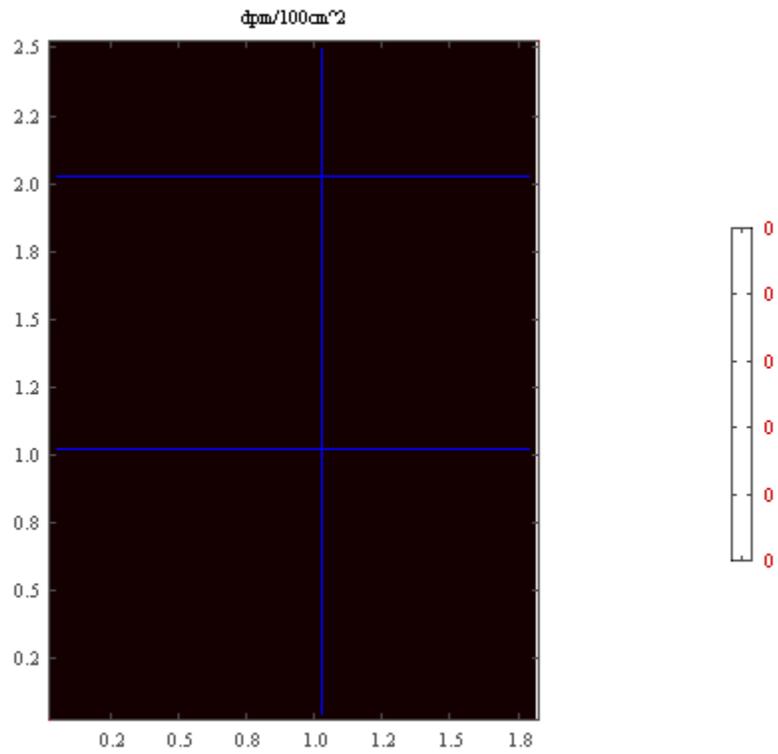


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4511B
Survey Date:	February 9, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

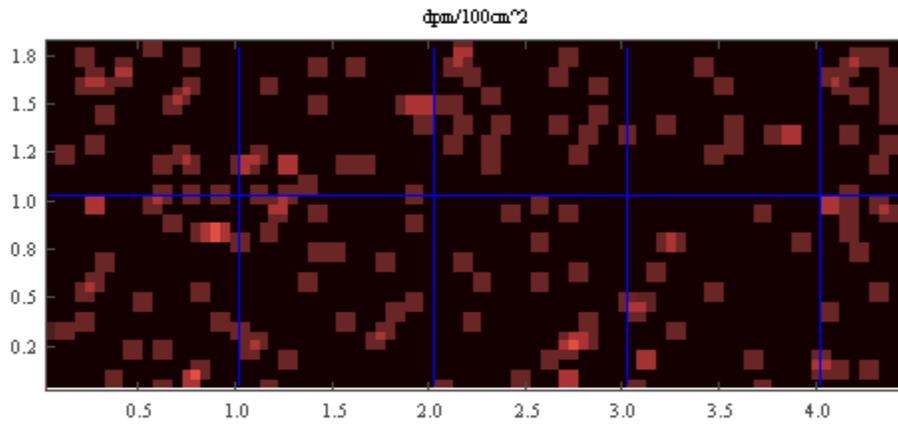


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

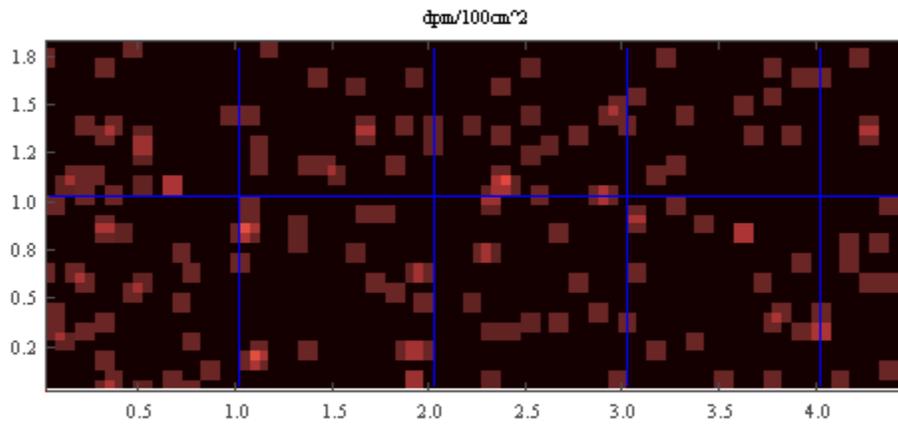


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

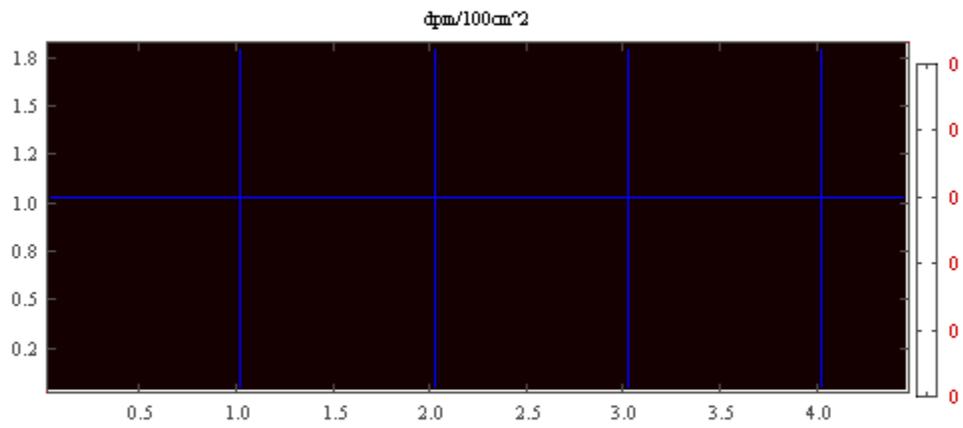


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4511C
Survey Date:	February 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

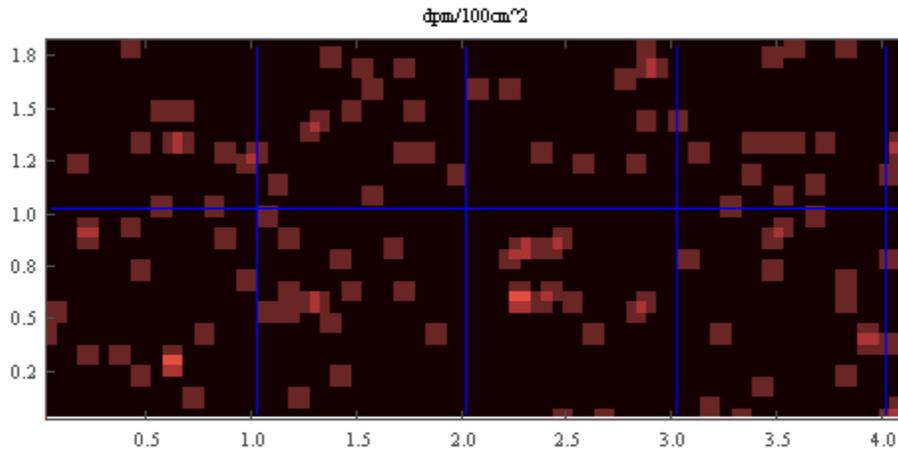


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

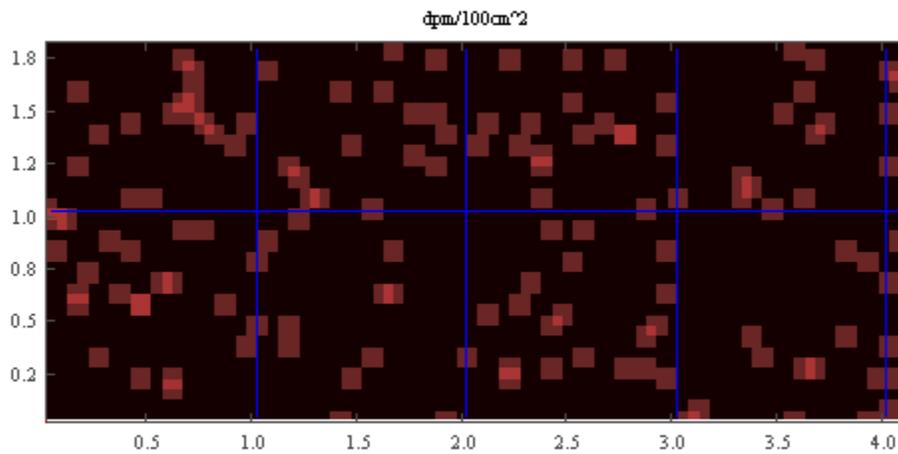


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

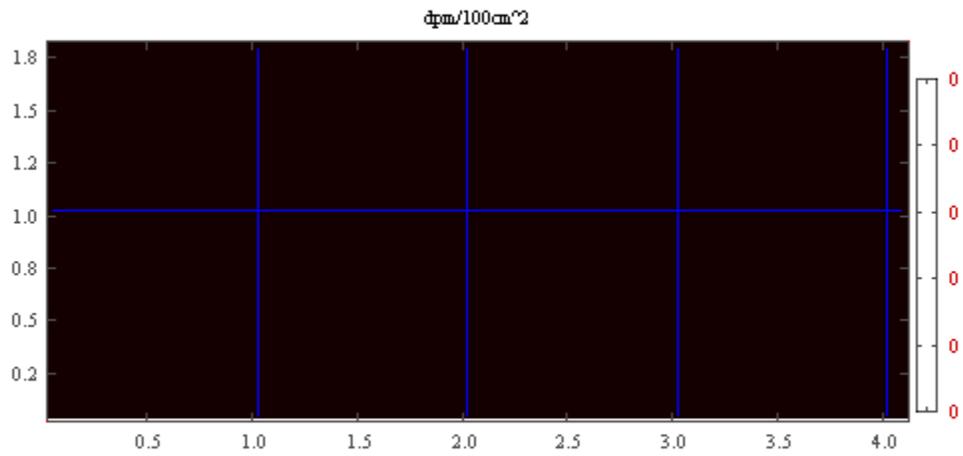


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4511D
Survey Date:	February 24, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

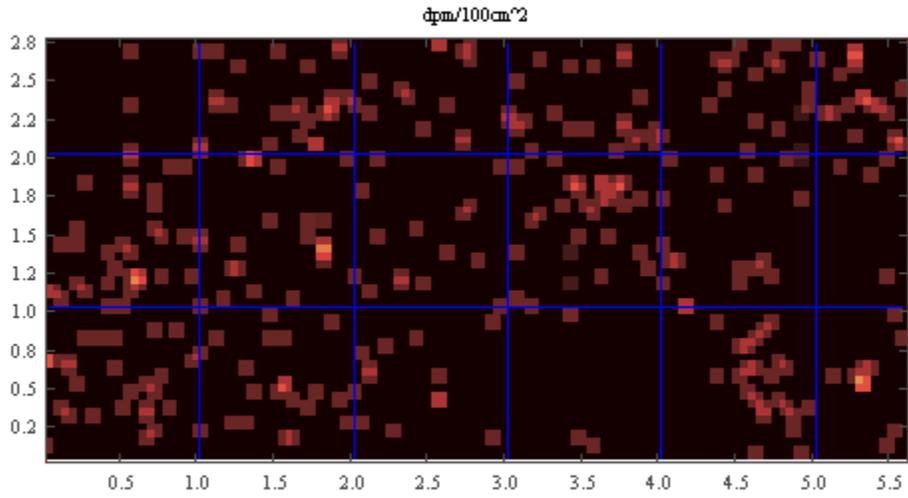


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

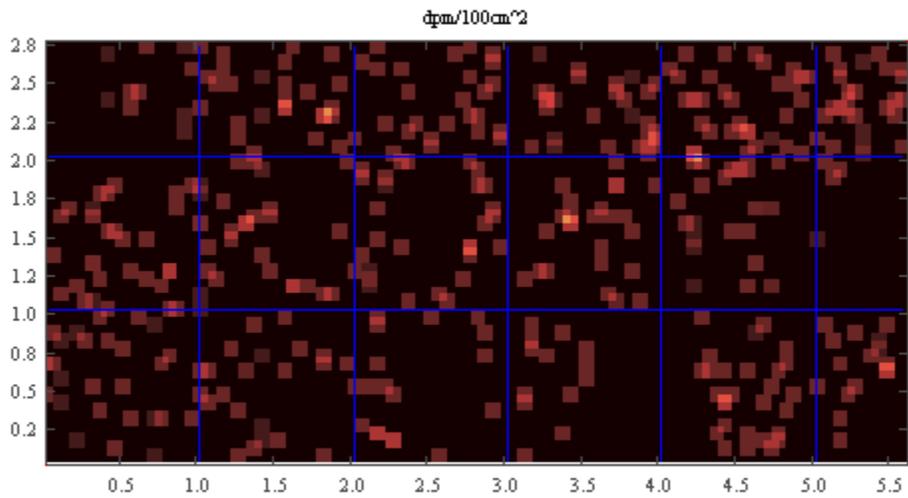


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

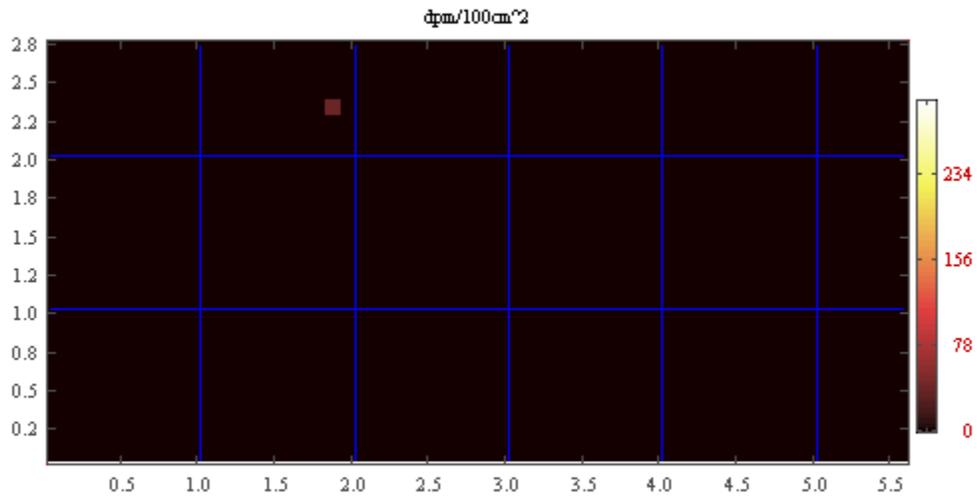


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4521A
Survey Date:	February 18, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

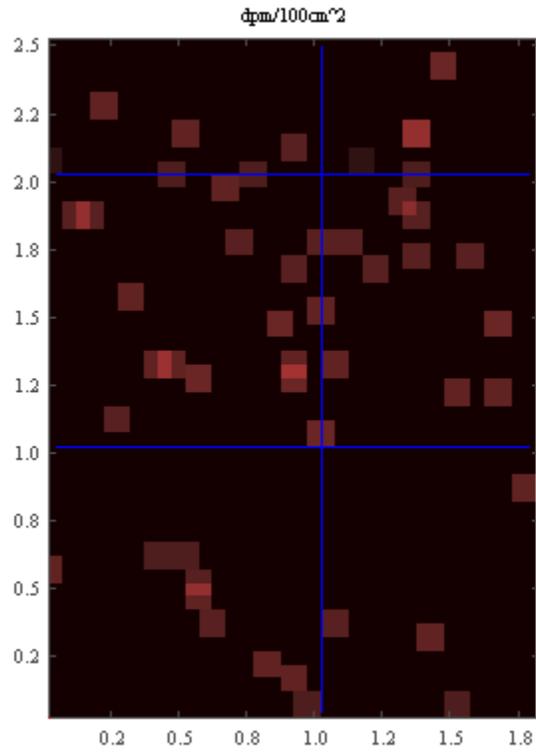


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

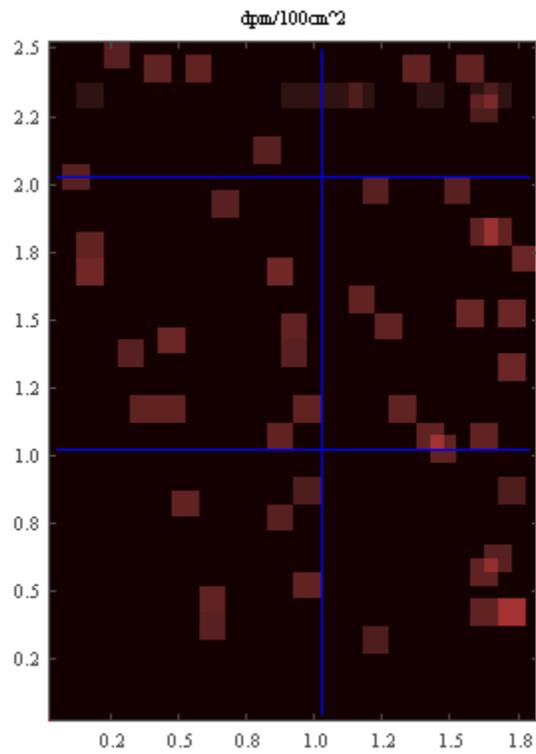


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

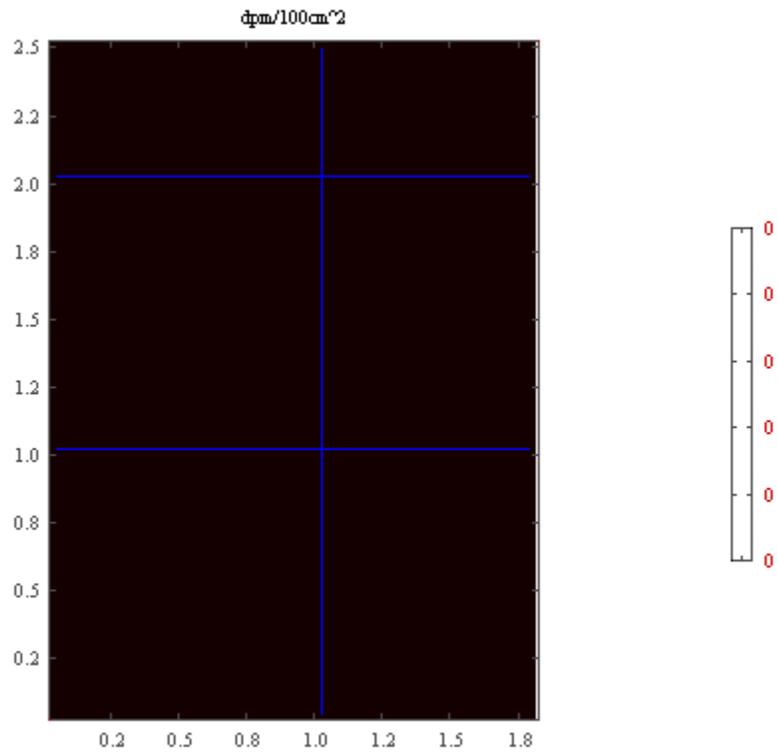


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4521B
Survey Date:	February 18, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

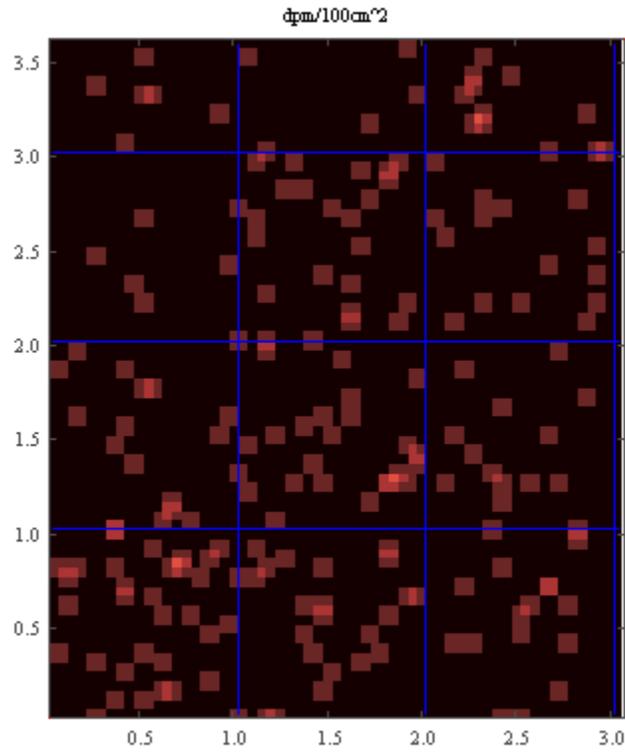


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

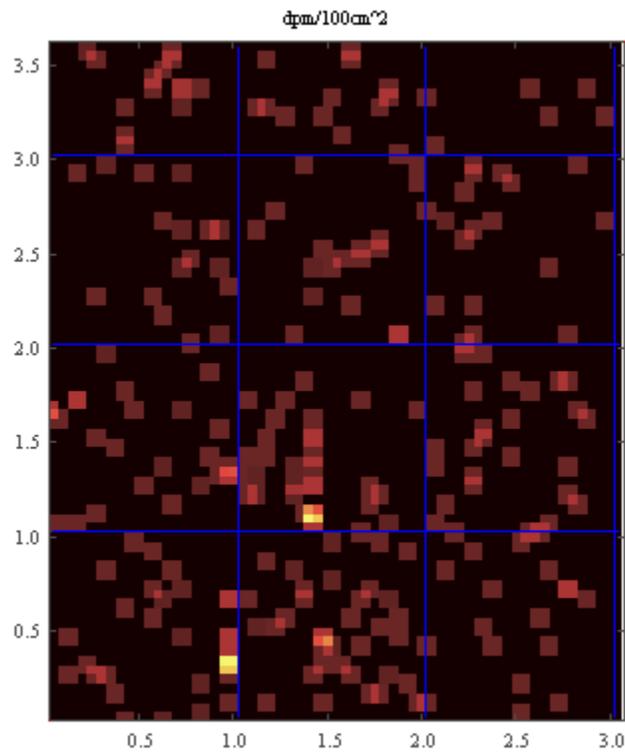


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

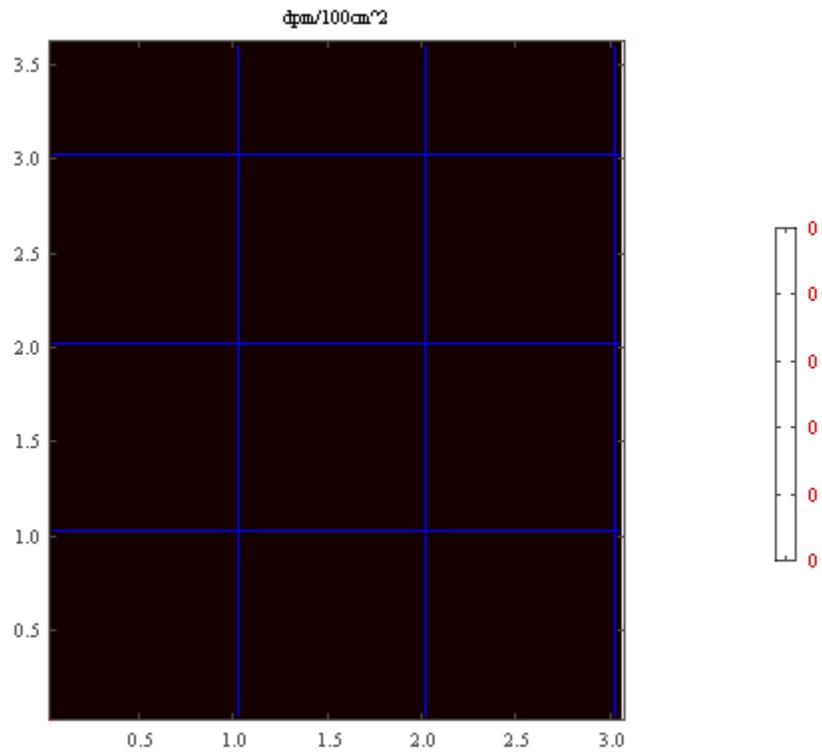


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4521C
Survey Date:	February 22, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

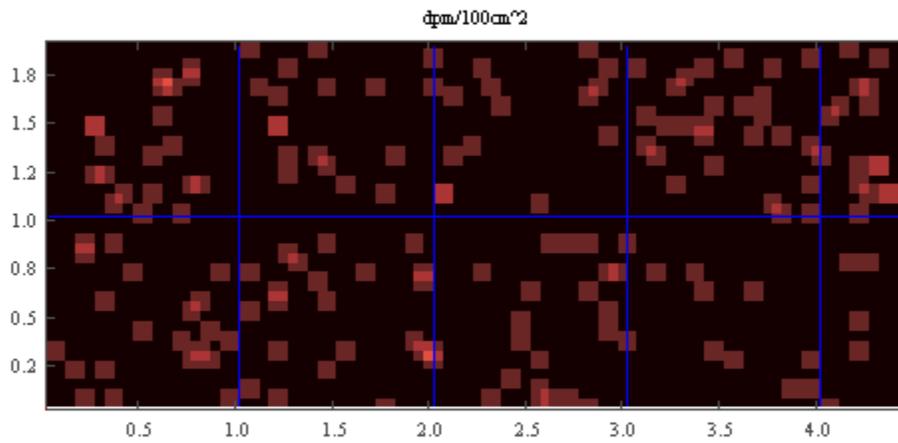


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

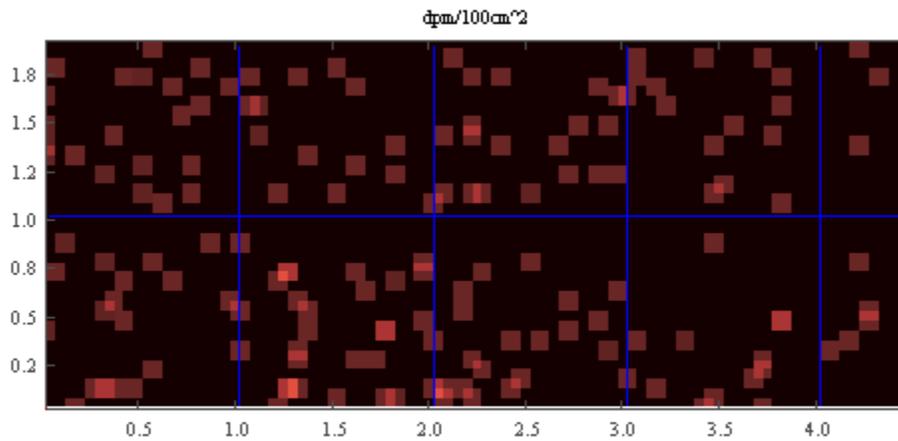


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

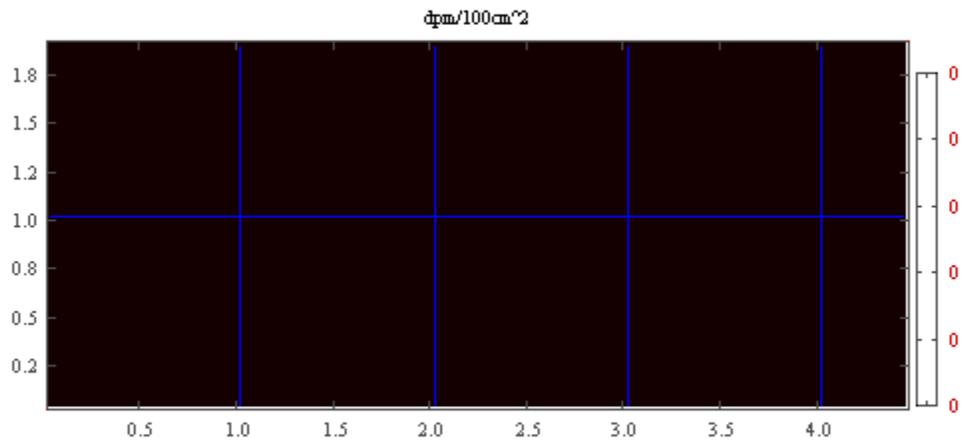


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4521D
Survey Date:	March 7, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	CASEY/CORD
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

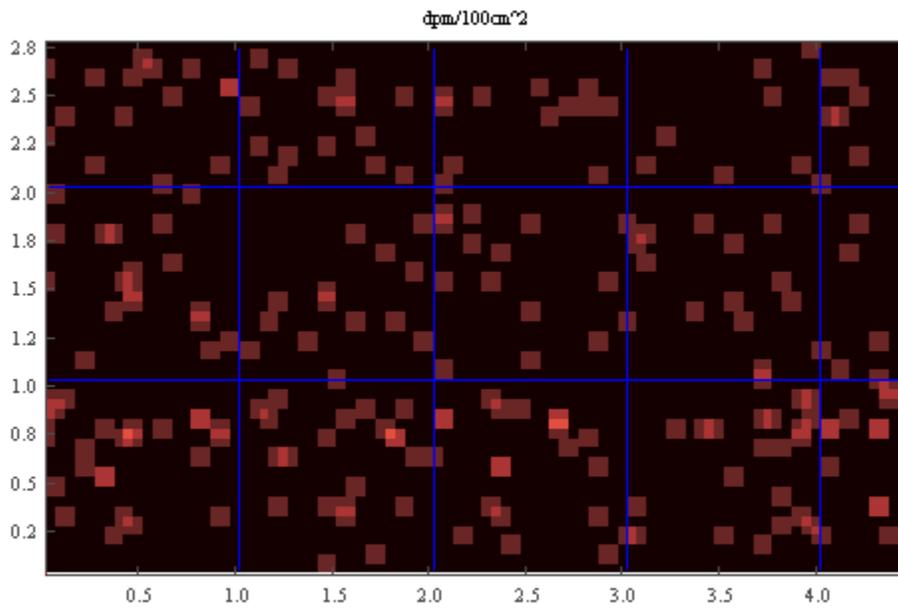


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

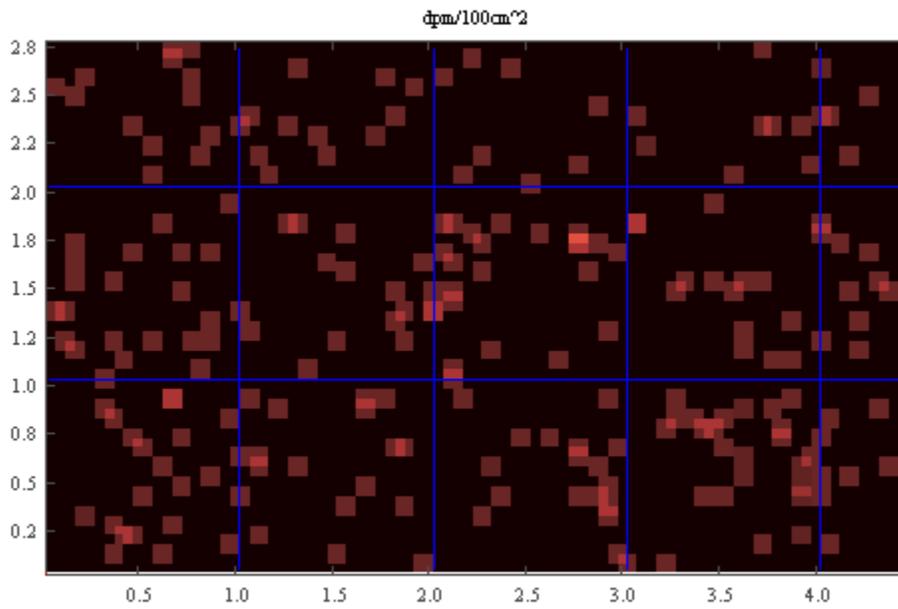


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

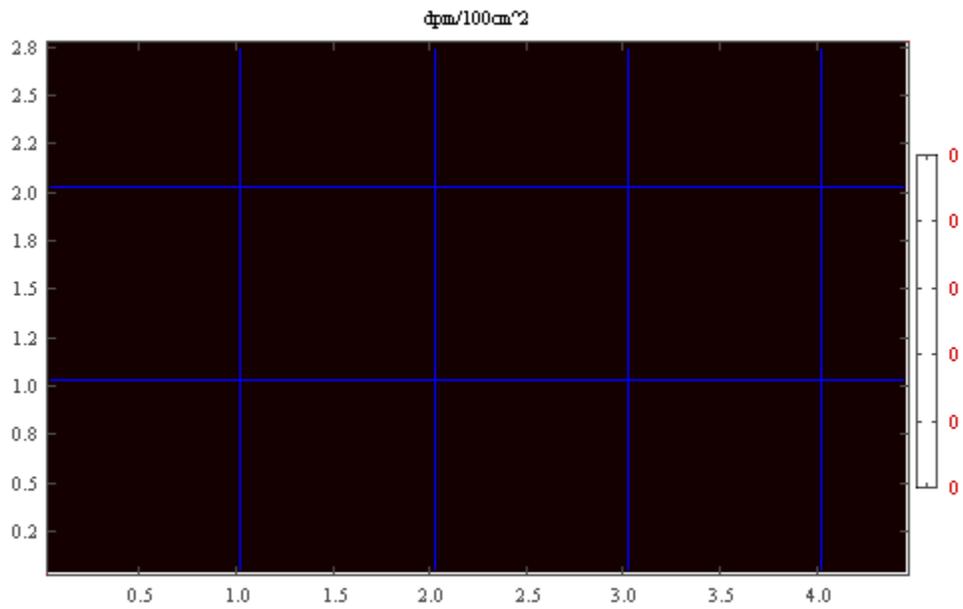


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4531A
Survey Date:	February 18, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	192 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.03 m ²

This survey is not position correlated.

Primary Detector:

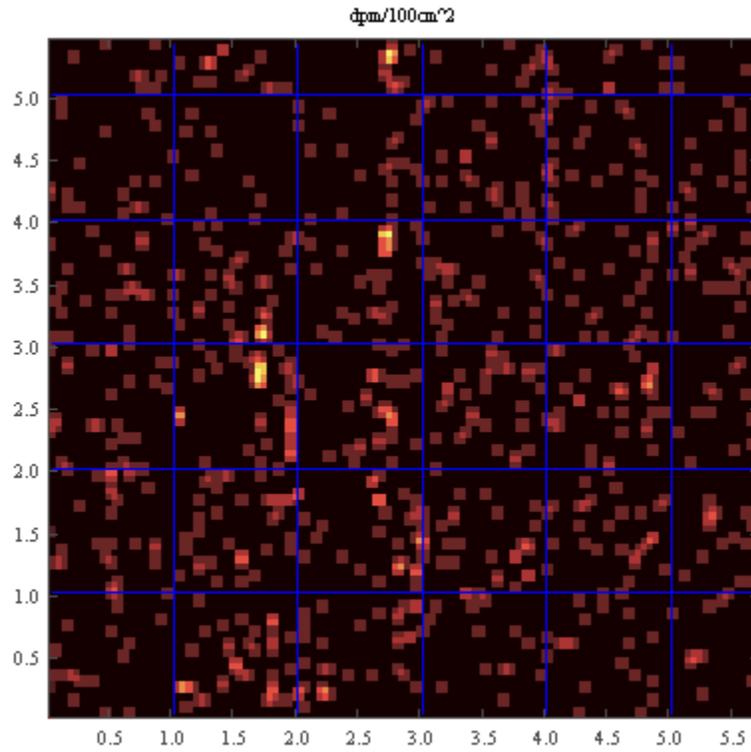


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

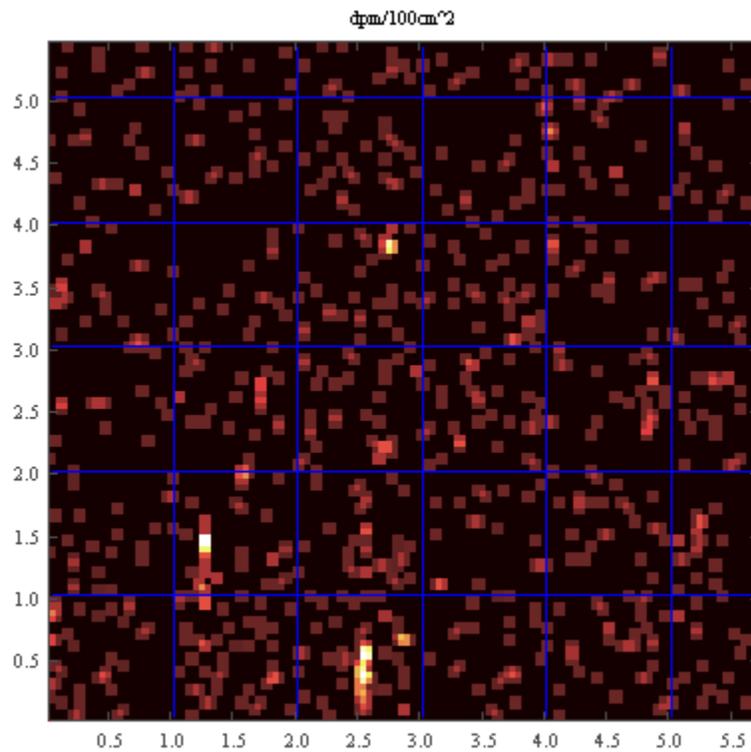


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

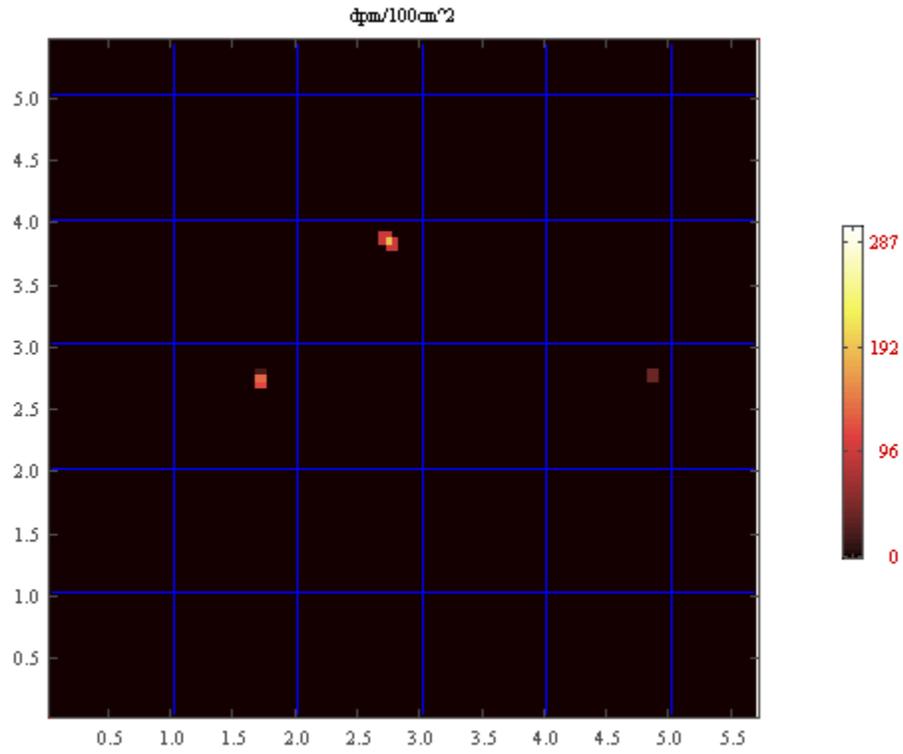


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

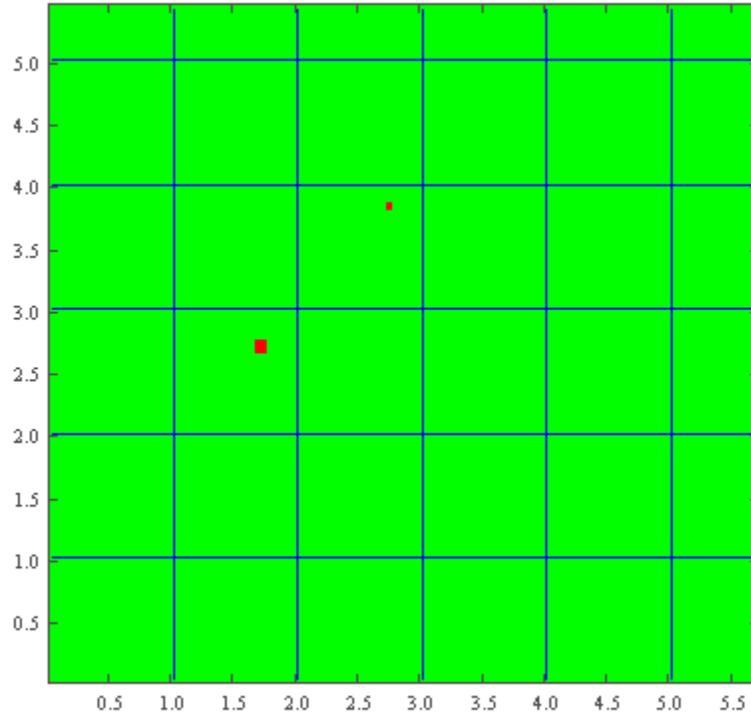


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	192	284	(275,385)	(0,15)	N/A		
Spot	132	148	(170,275)	(5,85)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4601A
Survey Date:	January 17, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	312 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.03 m ²

This survey is not position correlated.

Primary Detector:

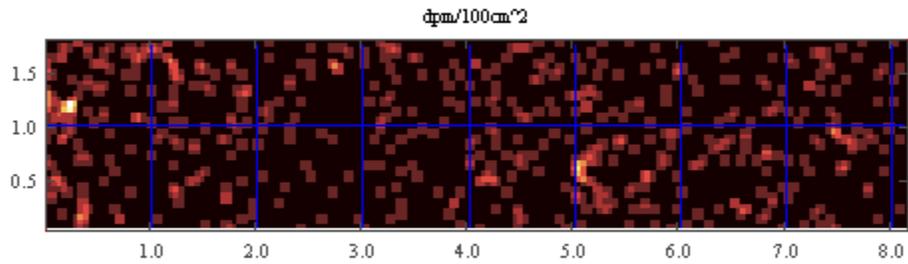


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

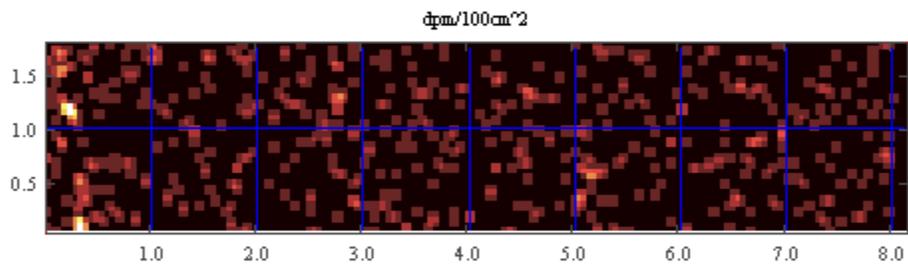


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

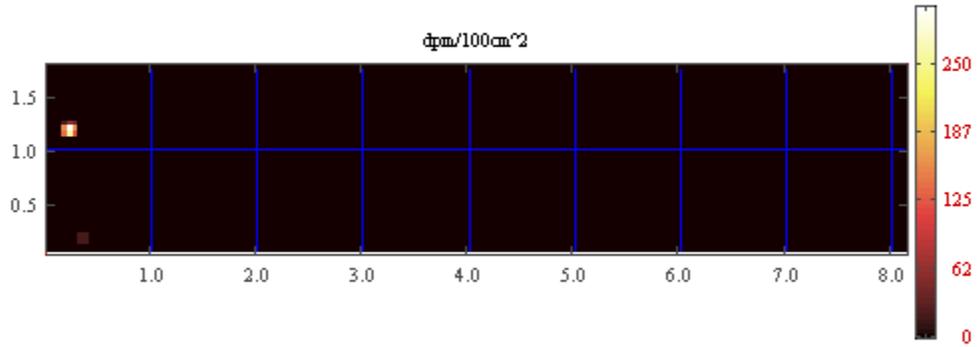


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

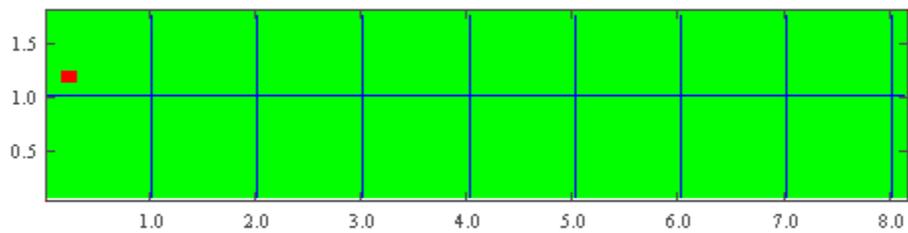


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	312	6	(25,120)	(0,115)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4601B
Survey Date:	February 15, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

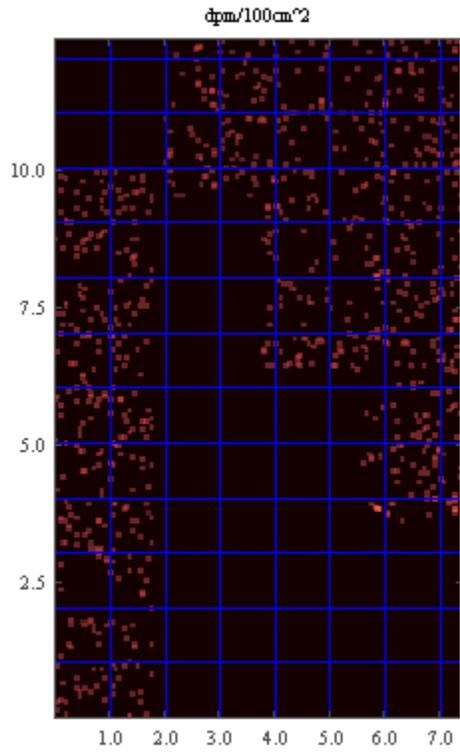


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

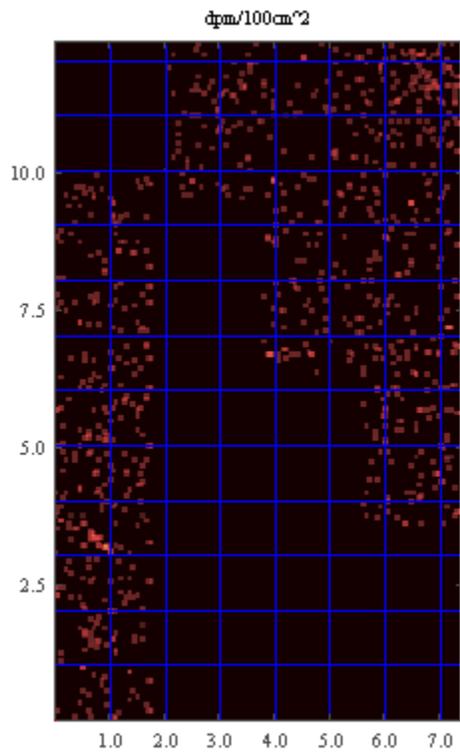


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

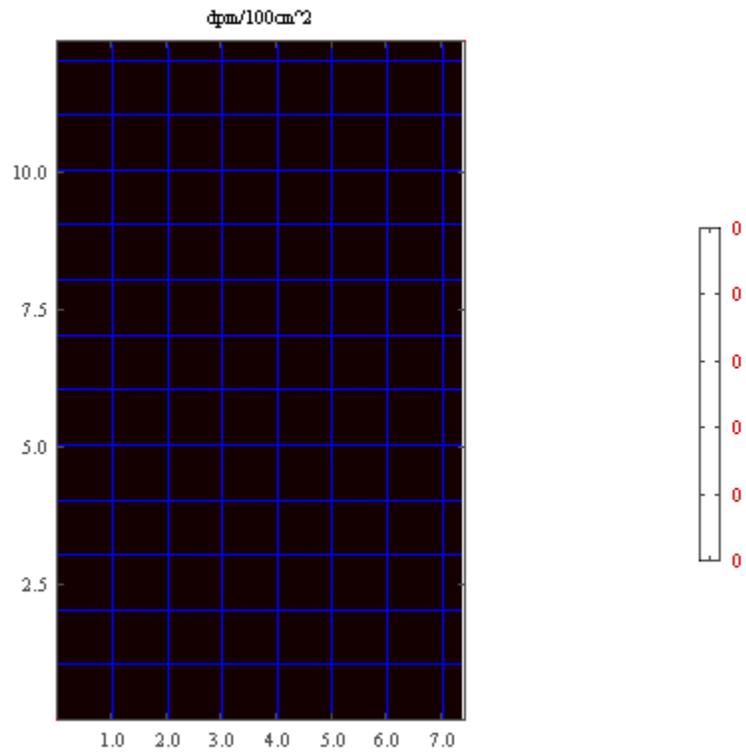


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4611A
Survey Date:	January 20, 2011
Survey Equipment:	SCM8
Detector(s):	C90 C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

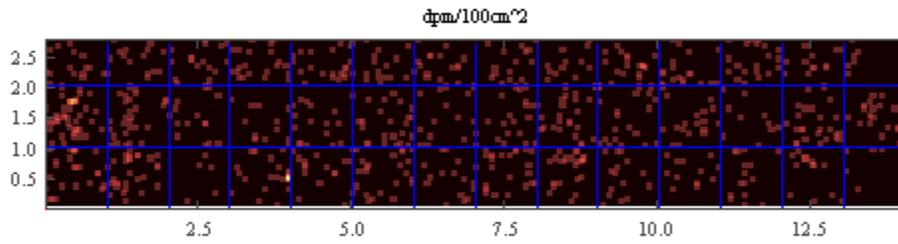


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

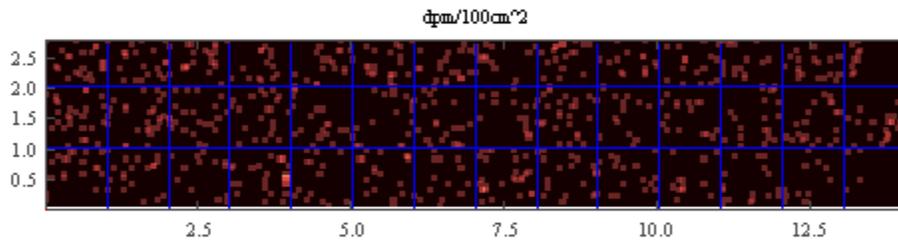


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

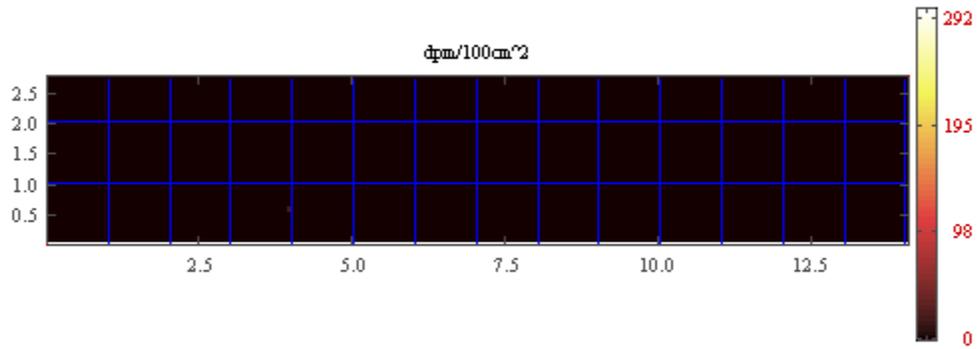


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4611B
Survey Date:	February 15, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

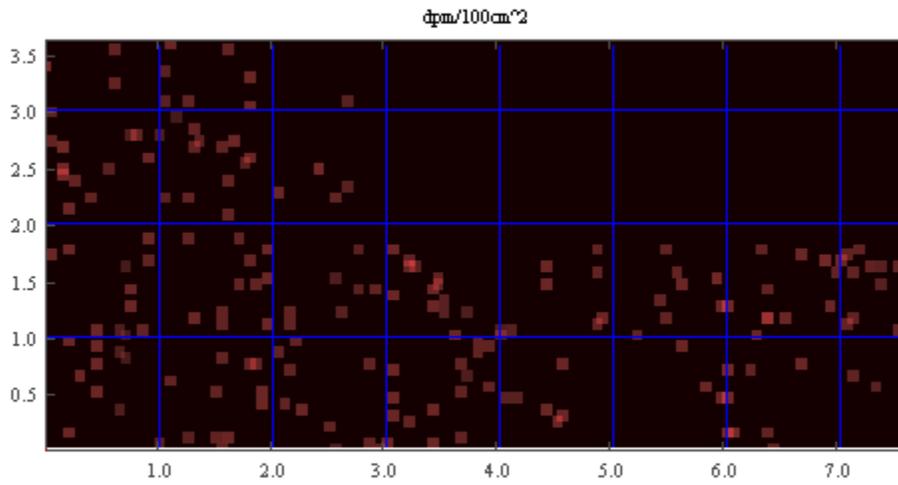


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

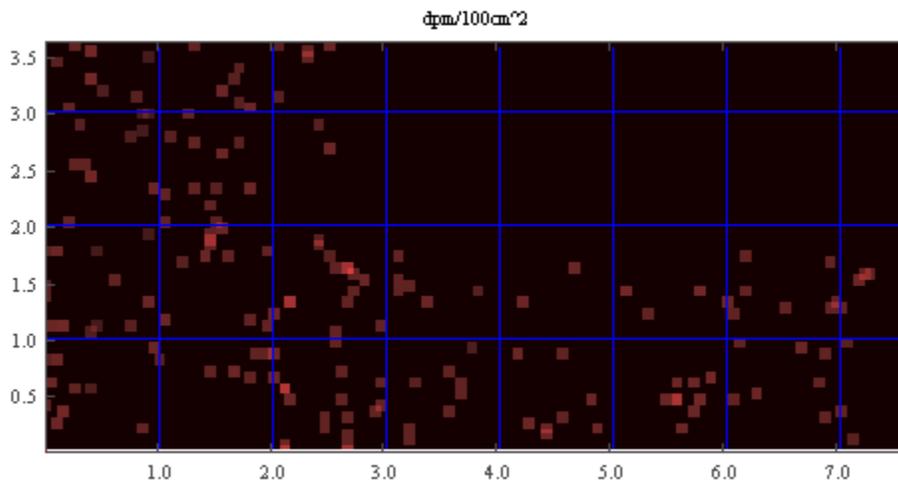


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

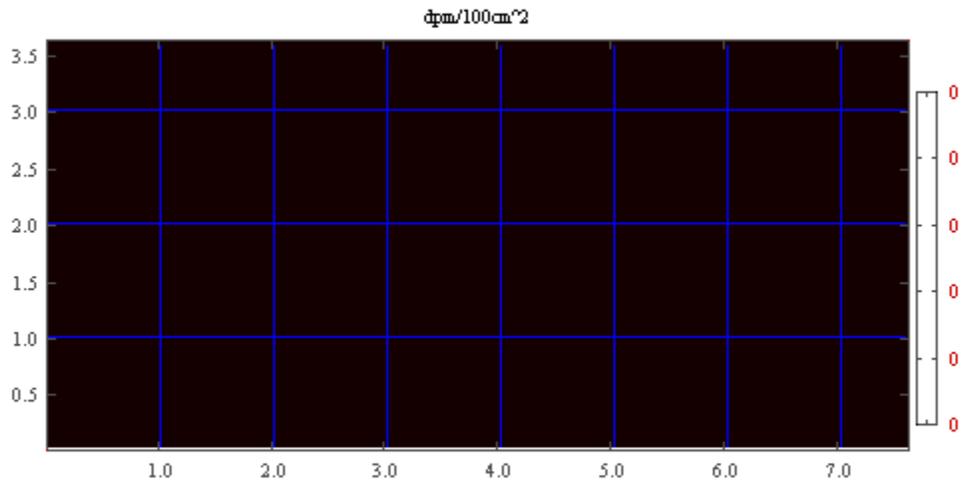


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4621A
Survey Date:	January 18, 2011
Survey Equipment:	SCM8
Detector(s):	C90 C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	468 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.03 m ²

This survey is not position correlated.

Primary Detector:

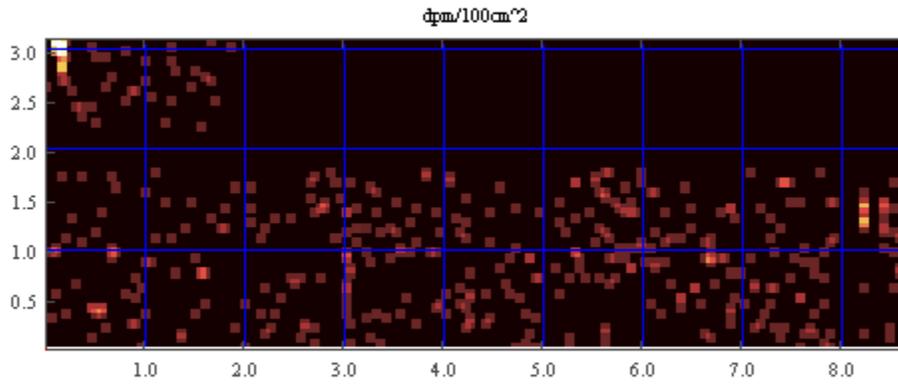


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

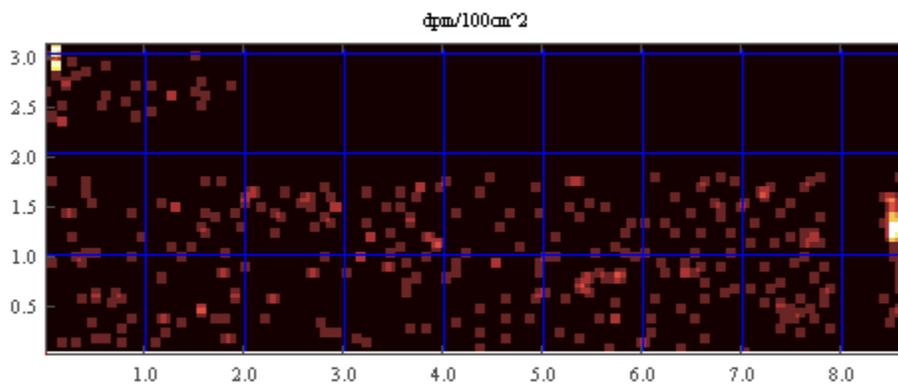


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

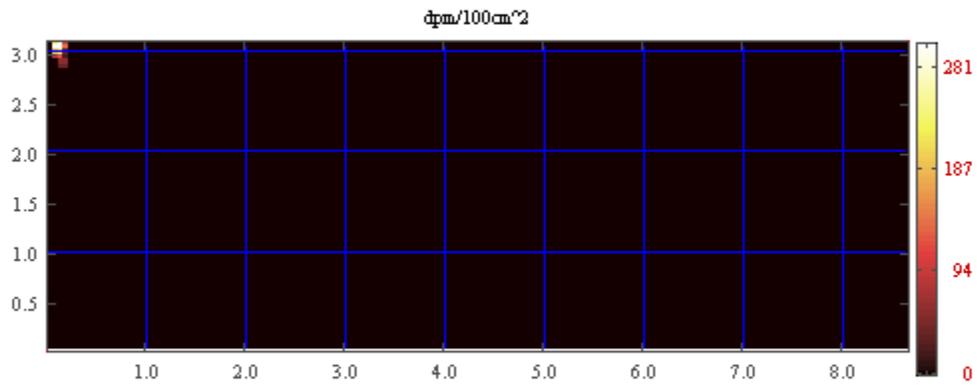


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

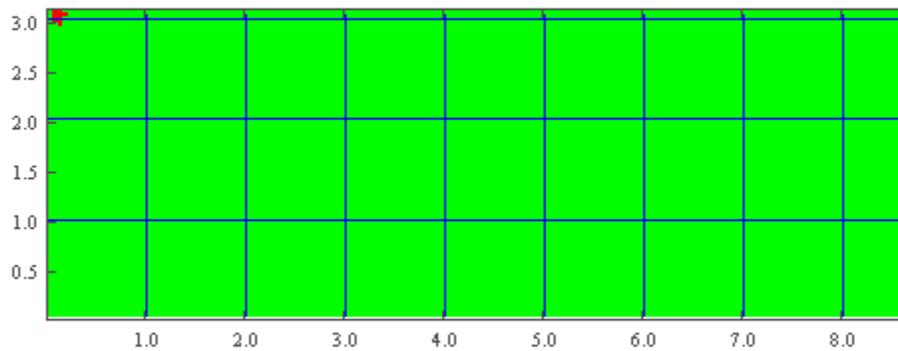


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	468	176	(15,305)	(0,80)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4621B
Survey Date:	February 15, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

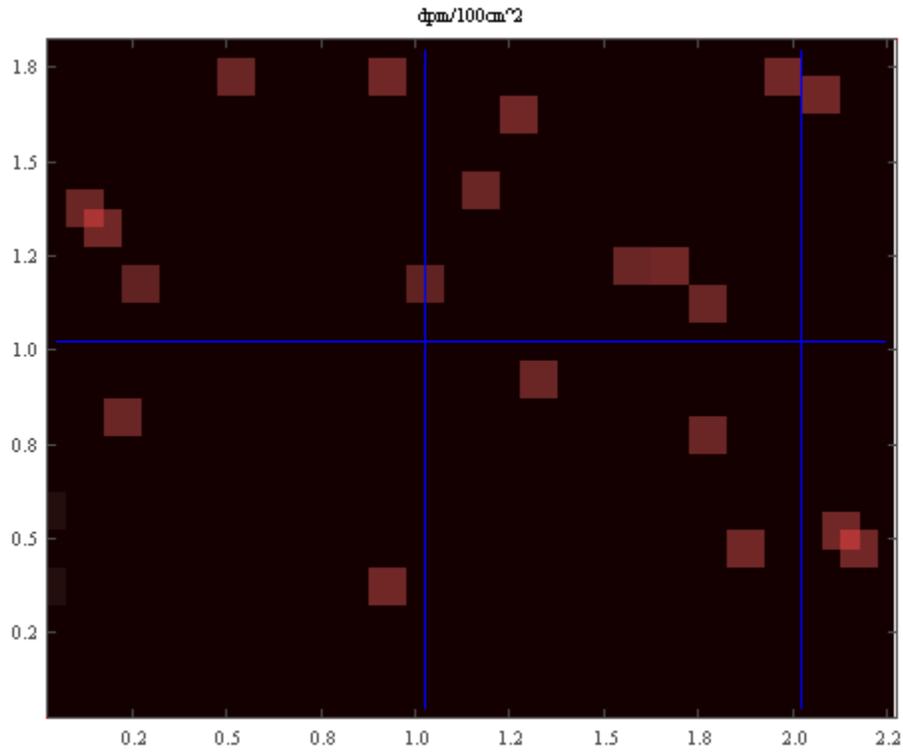


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

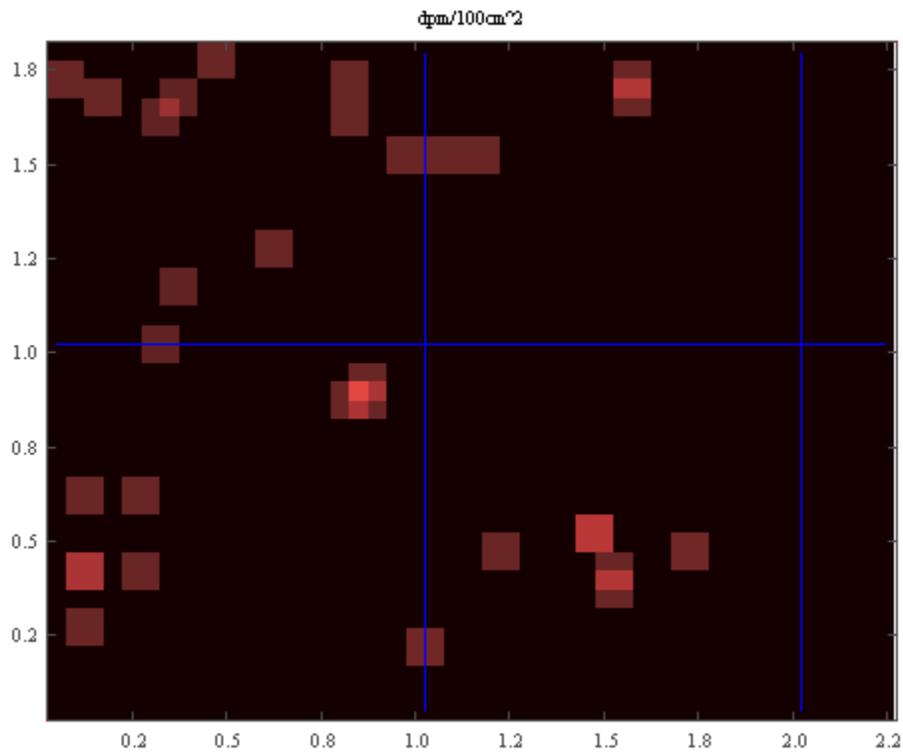


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

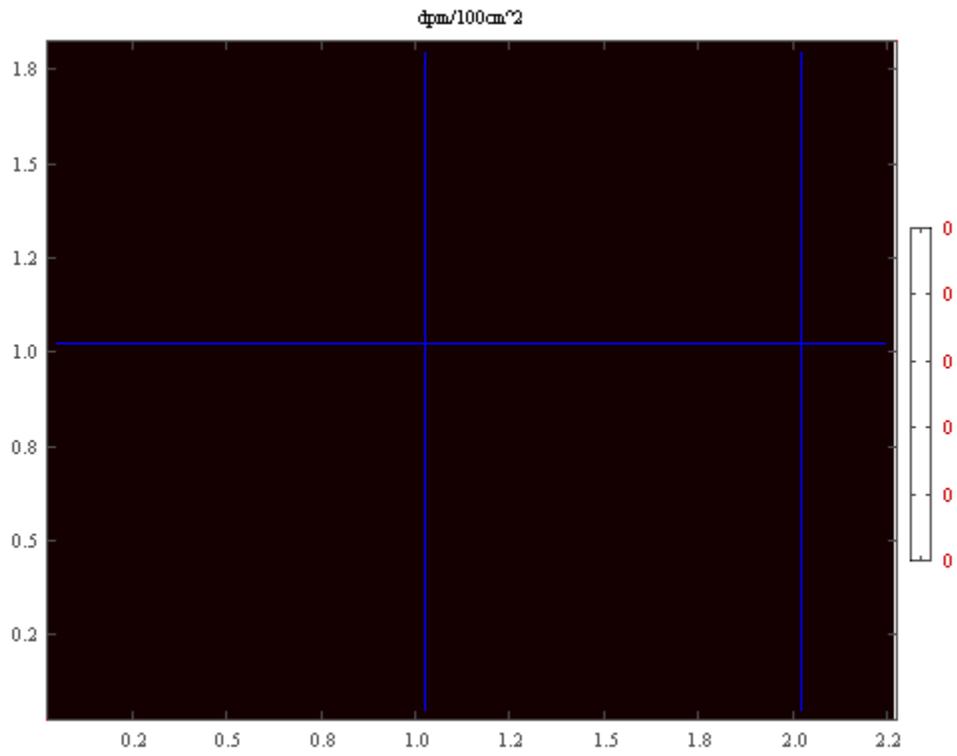


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4631A
Survey Date:	January 20, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

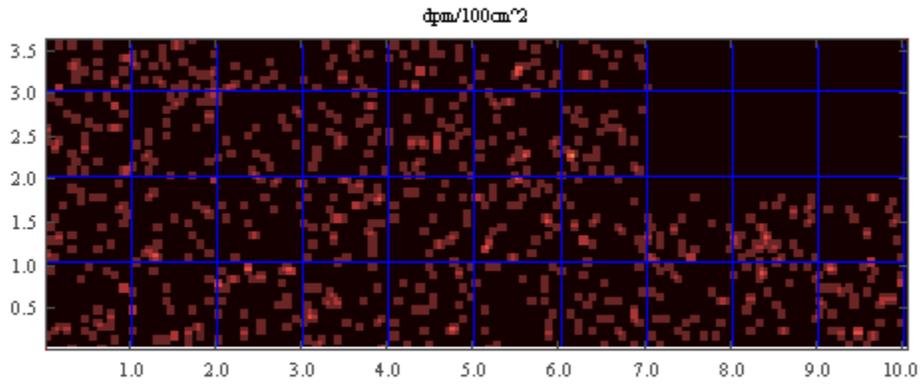


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

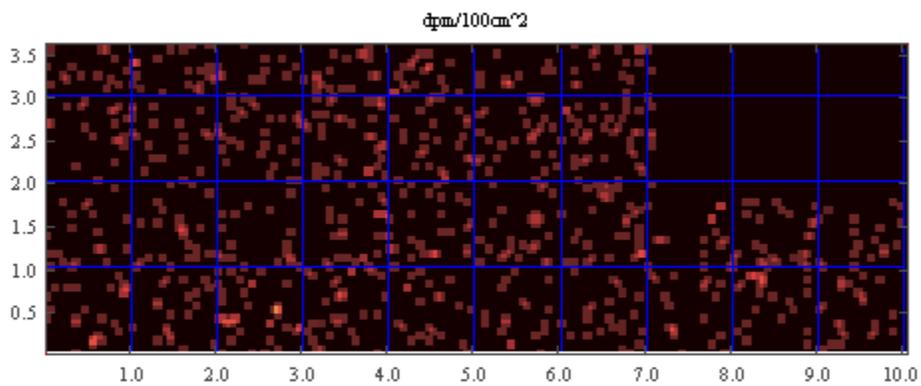


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

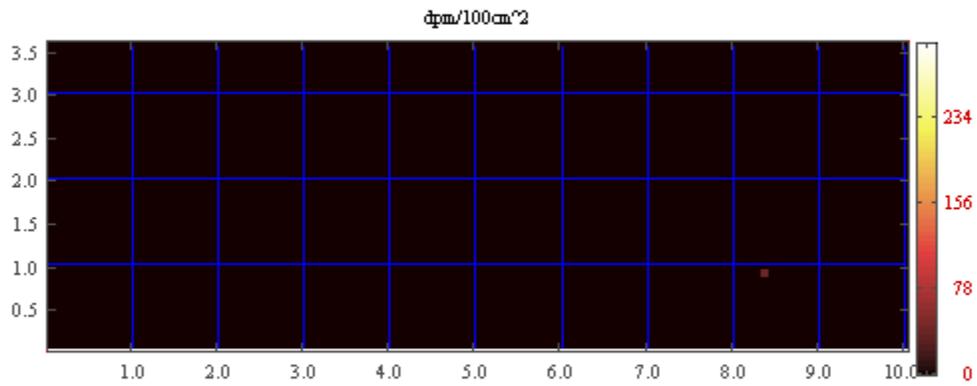


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4701A
Survey Date:	February 8, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

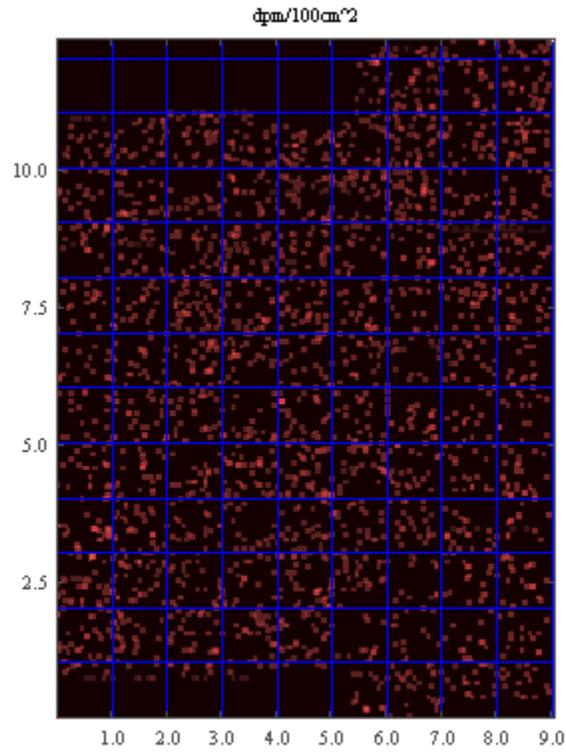


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

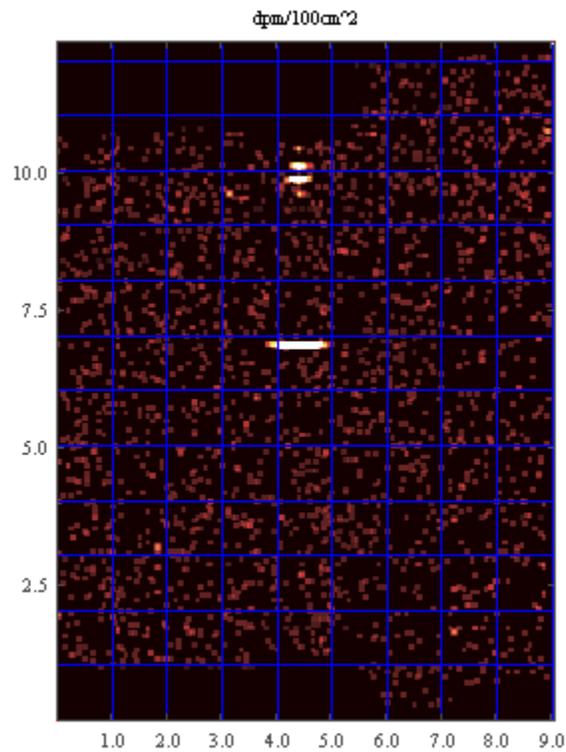


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

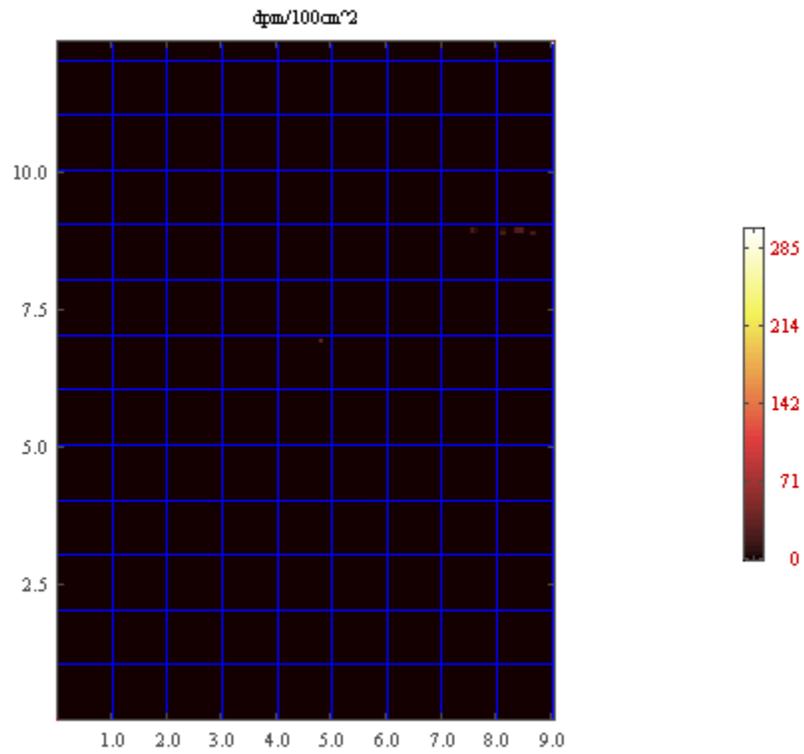


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4701B
Survey Date:	February 10, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

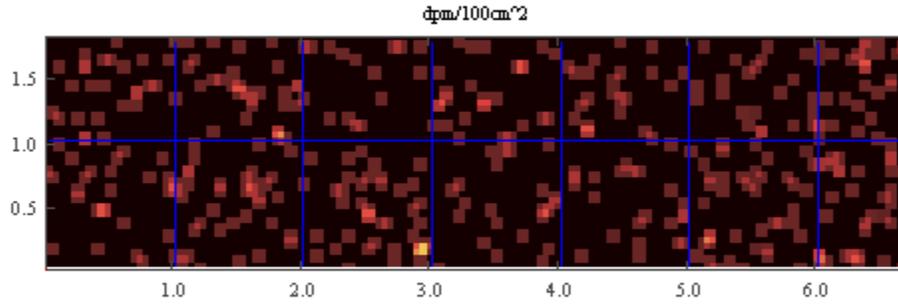


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

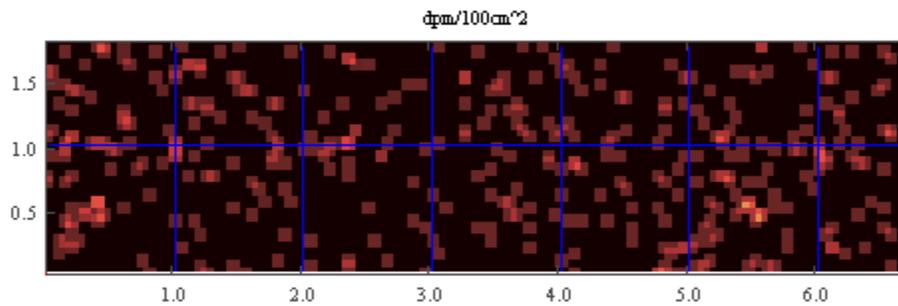


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

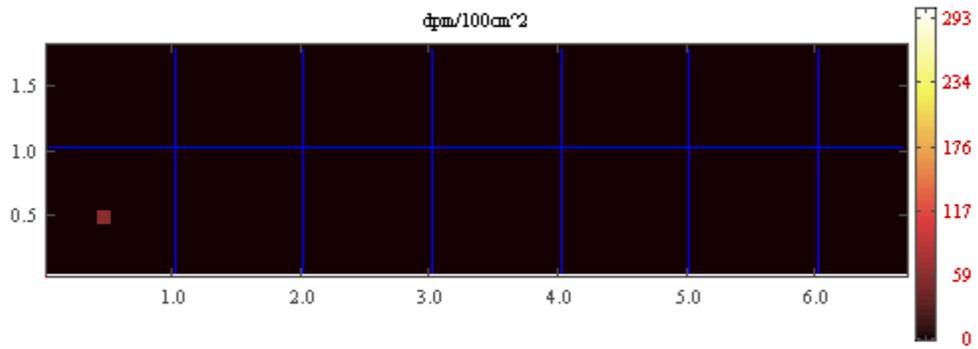


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4711A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

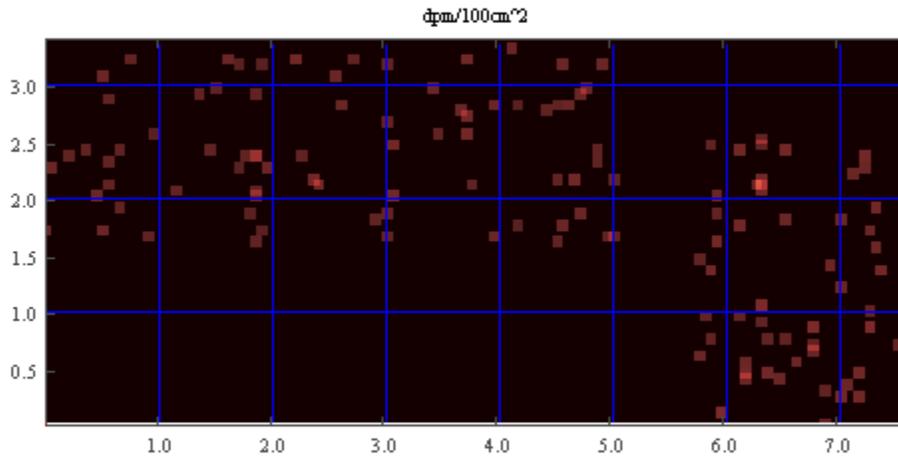


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

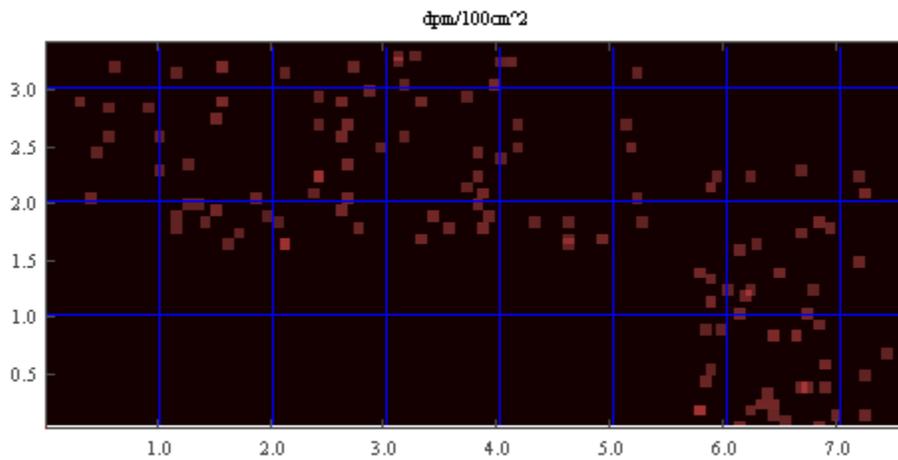


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

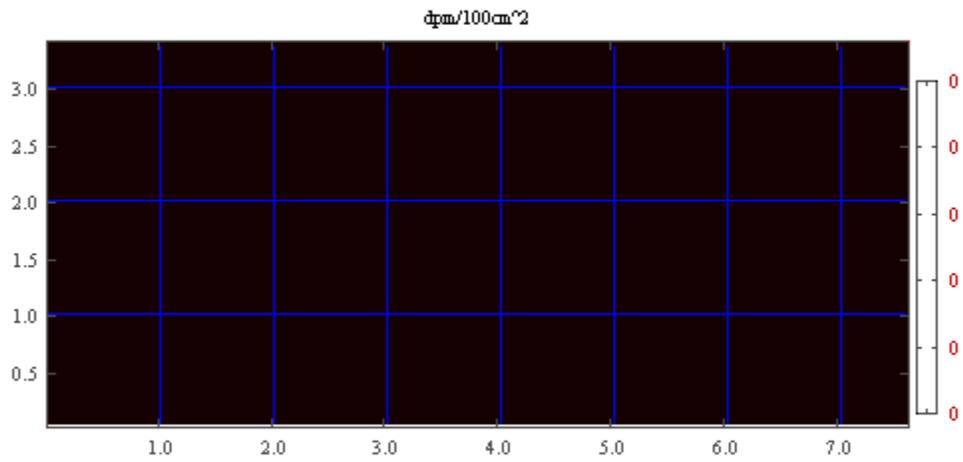


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4711B
Survey Date:	February 10, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

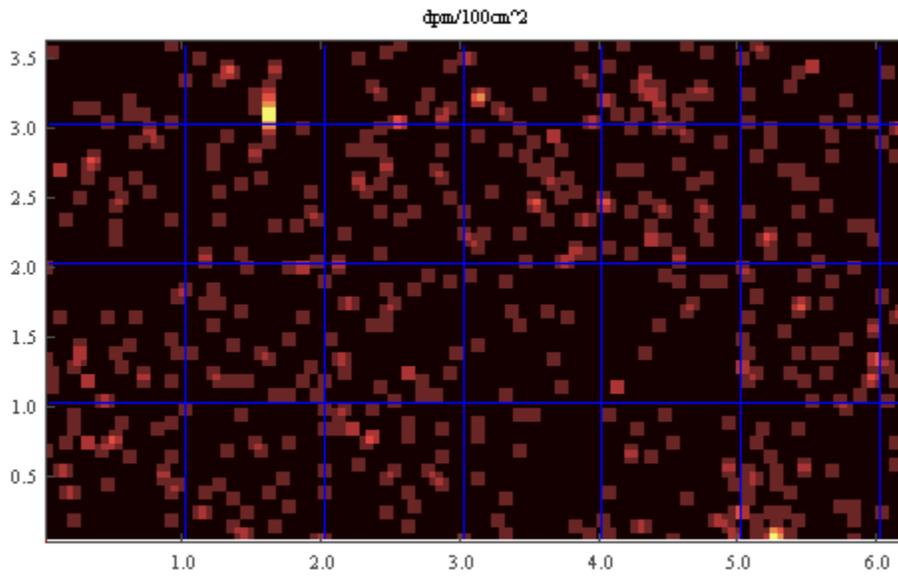


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

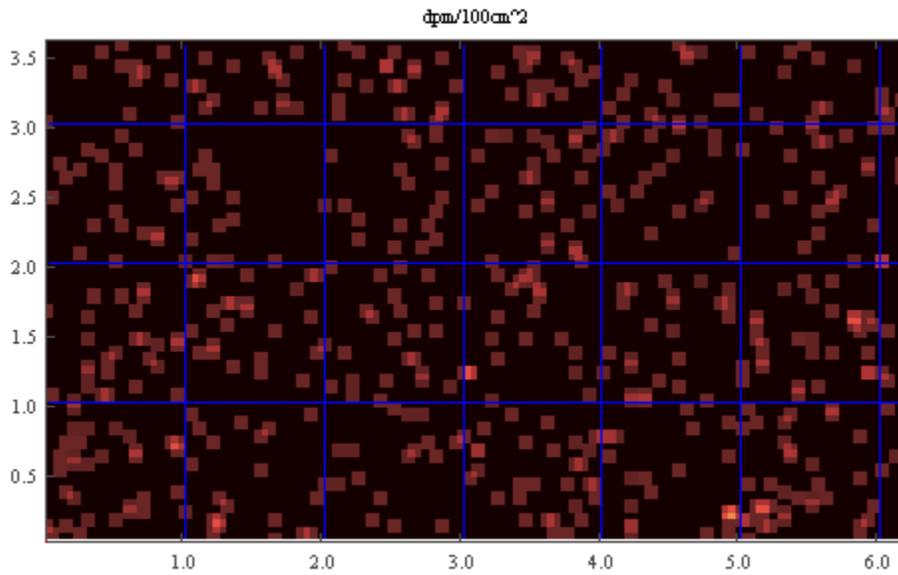


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

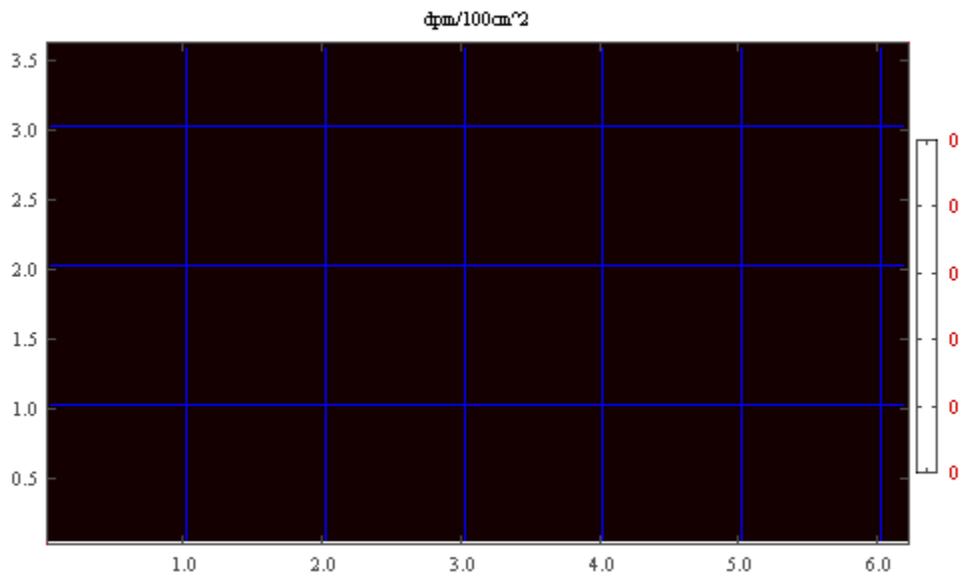


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4711C
Survey Date:	March 4, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

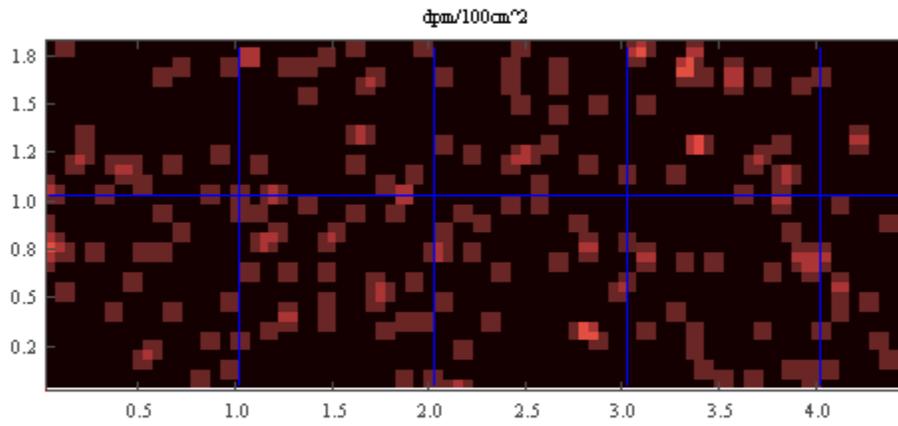


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

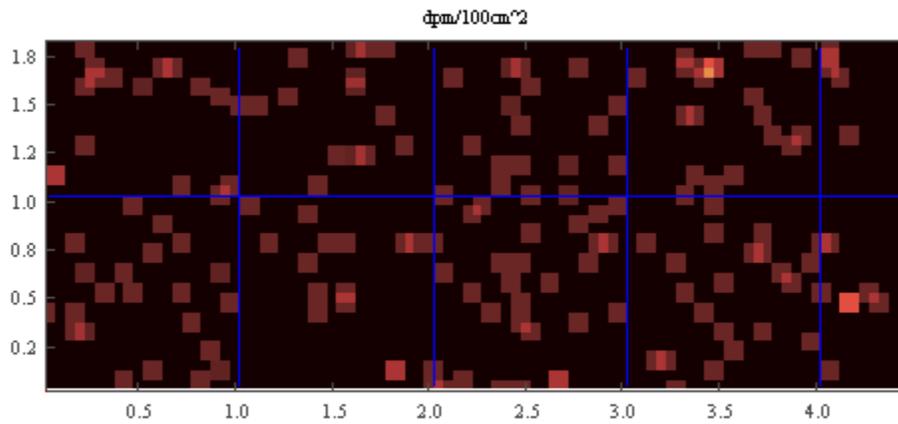


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

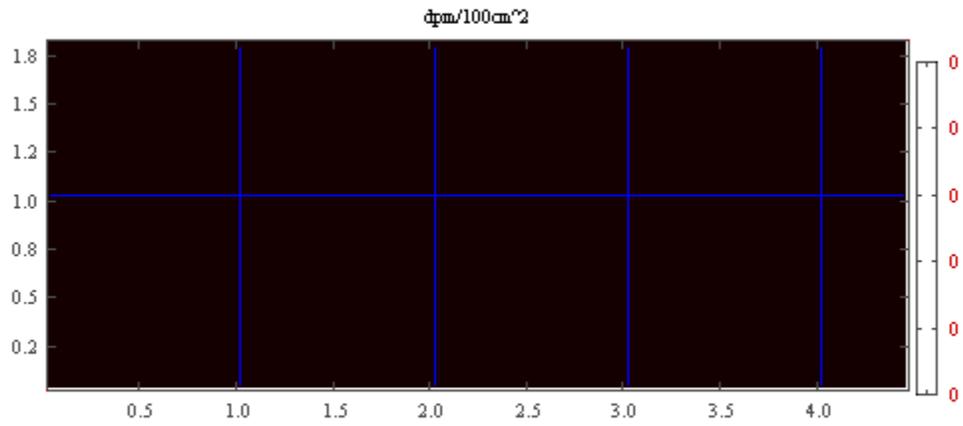


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4721A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

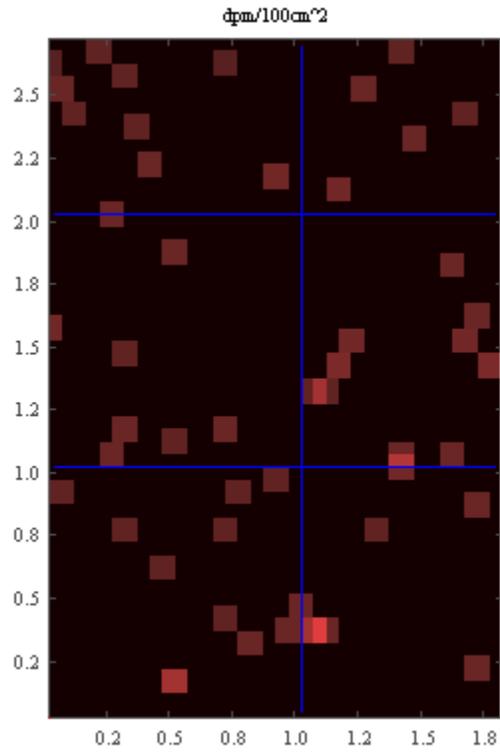


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

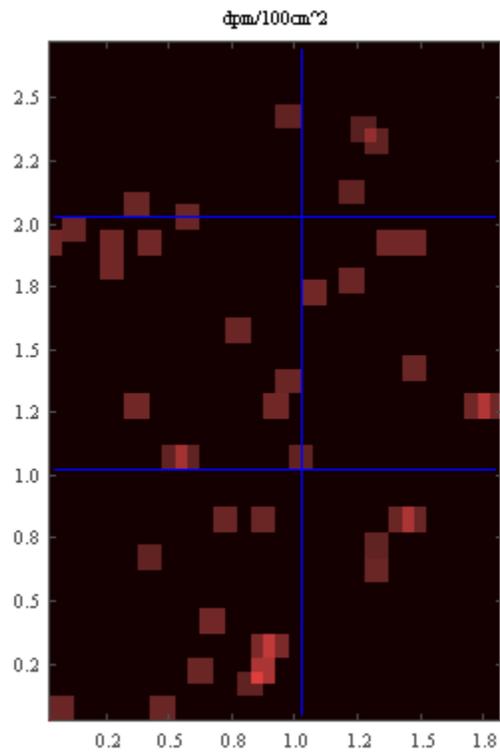


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

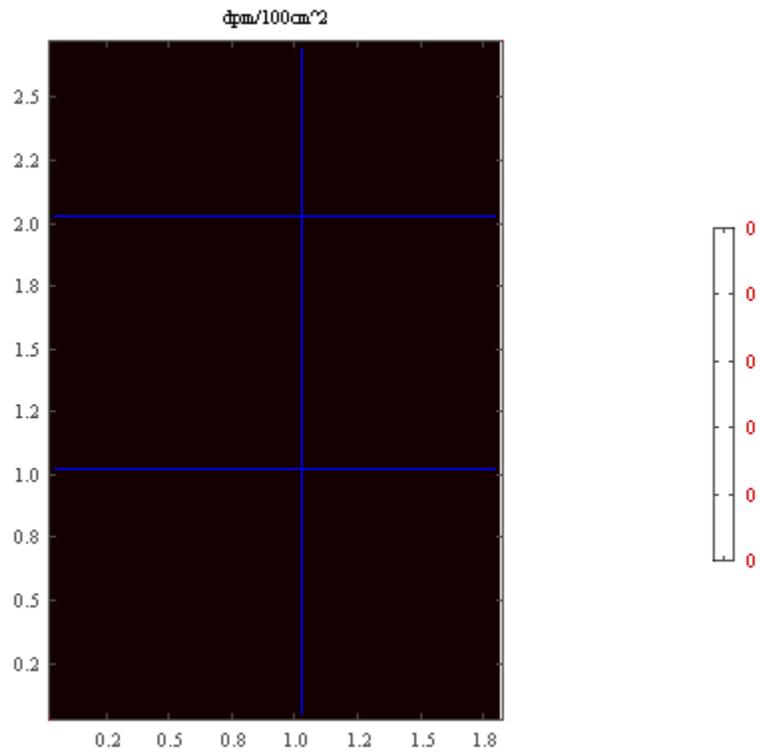


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4721B
Survey Date:	February 22, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

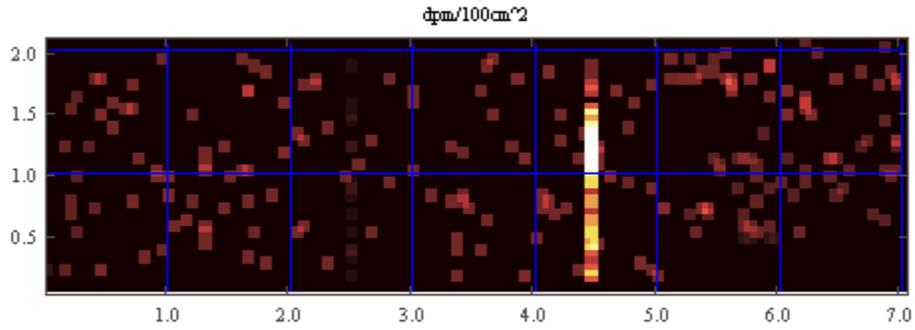


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

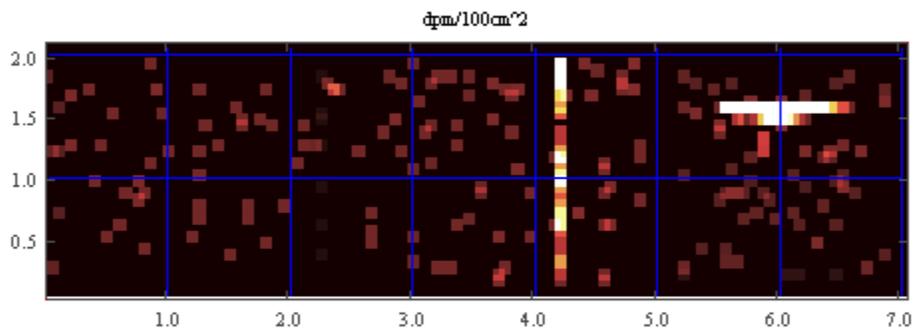


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

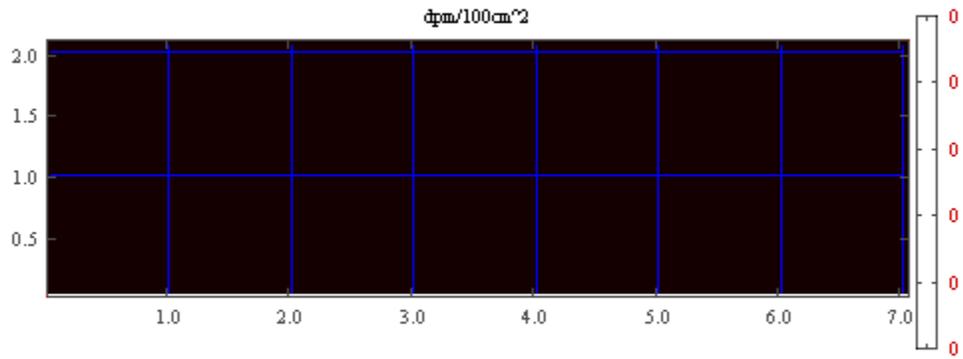


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4721Z
Survey Date:	February 24, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	118 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.01 m ²

This survey is not position correlated.

Primary Detector:

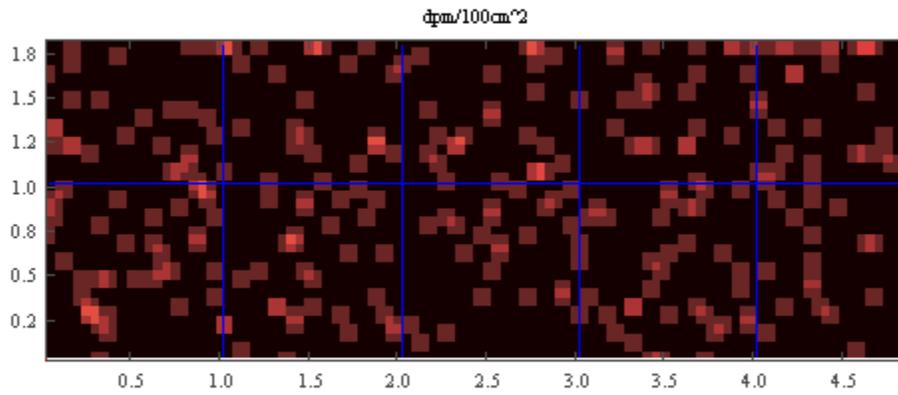


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

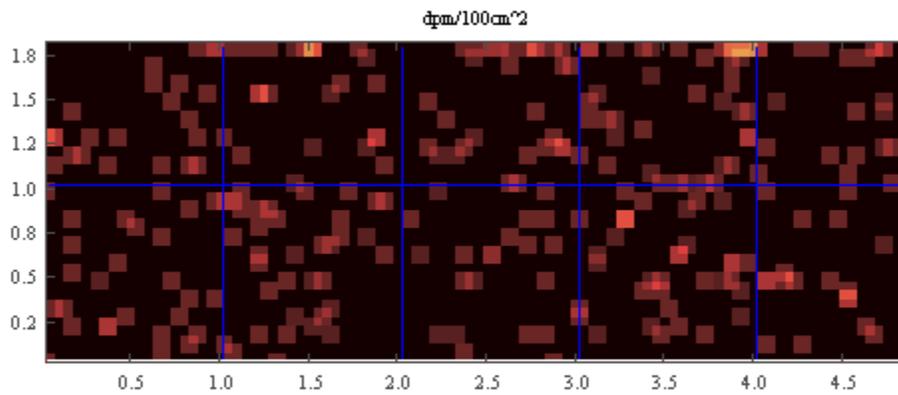


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

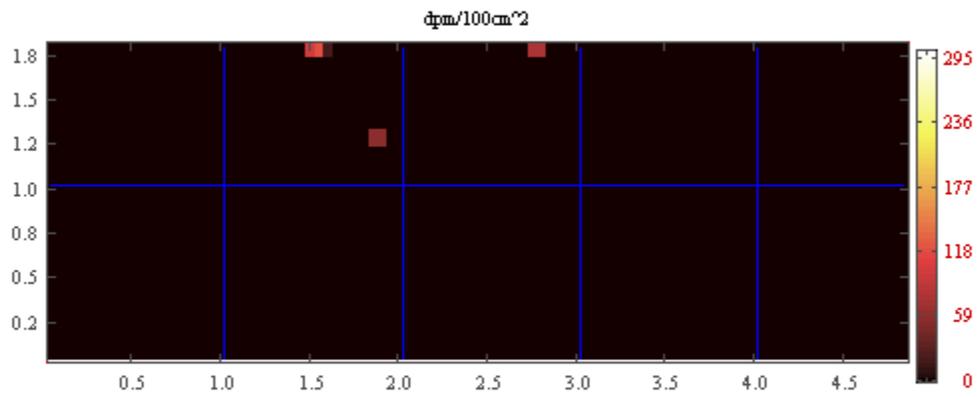


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

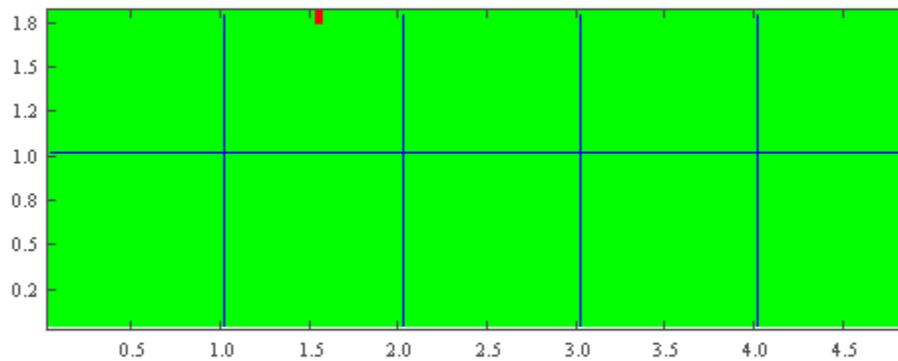


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	118	32	(155,175)	(0,170)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4731A
Survey Date:	February 28, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

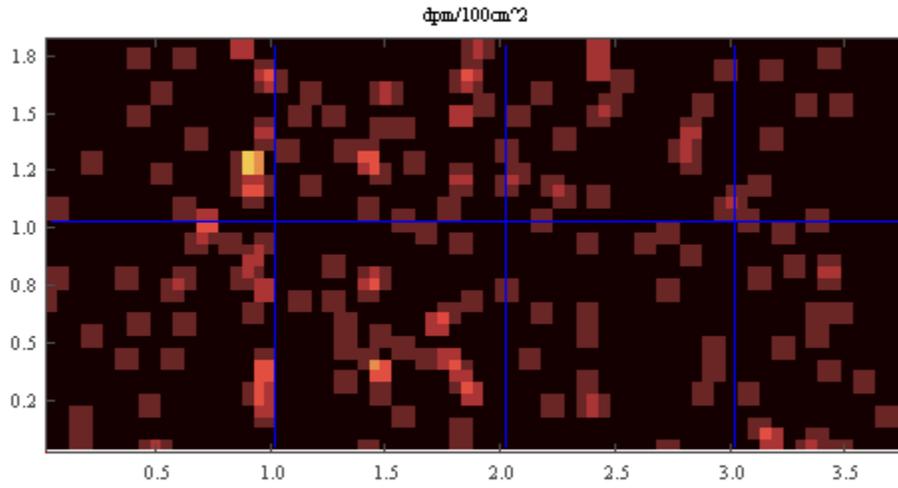


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

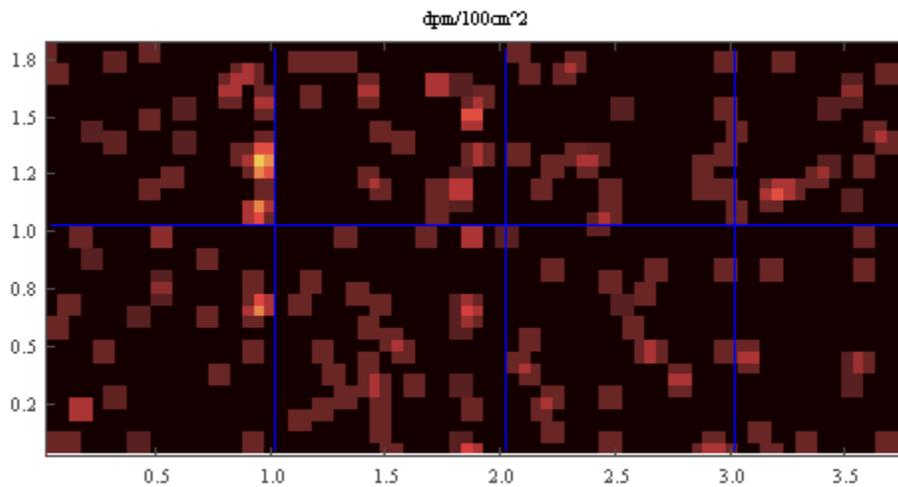


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

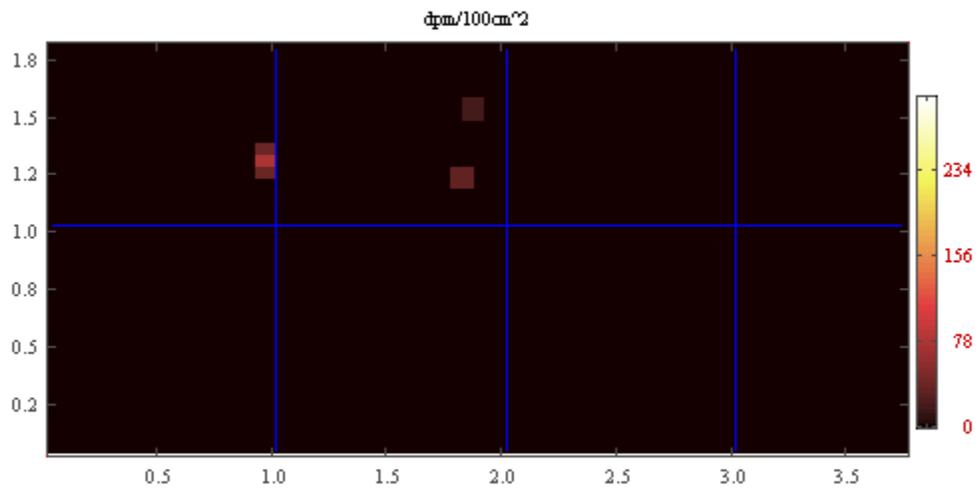


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4731B
Survey Date:	March 1, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

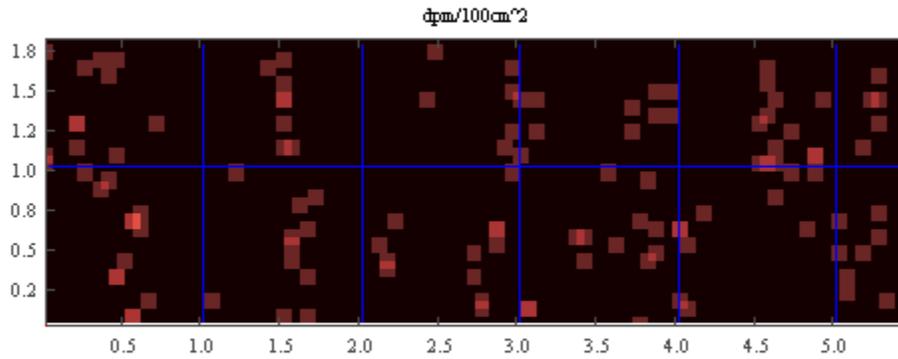


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

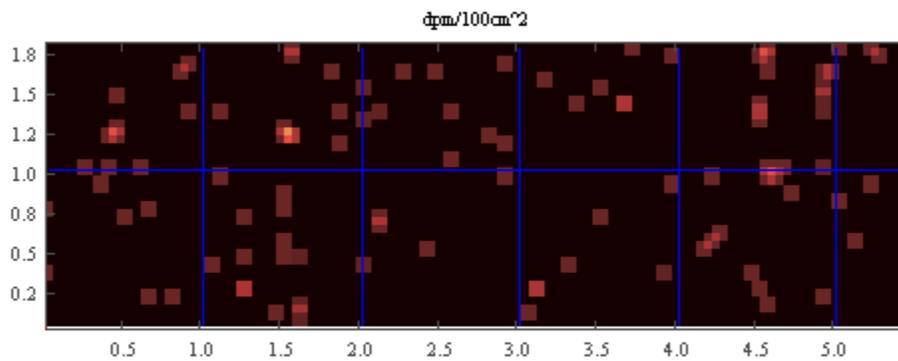


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

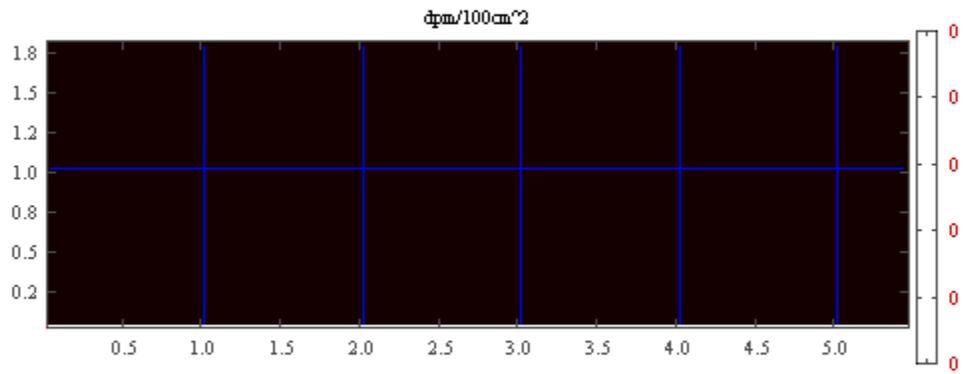


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4801A
Survey Date:	February 8, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	1,108 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.65 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

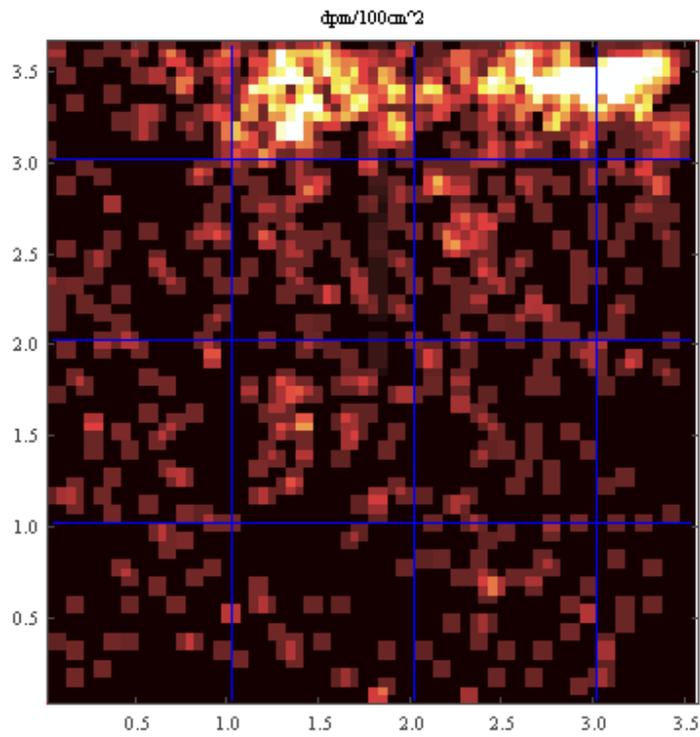


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

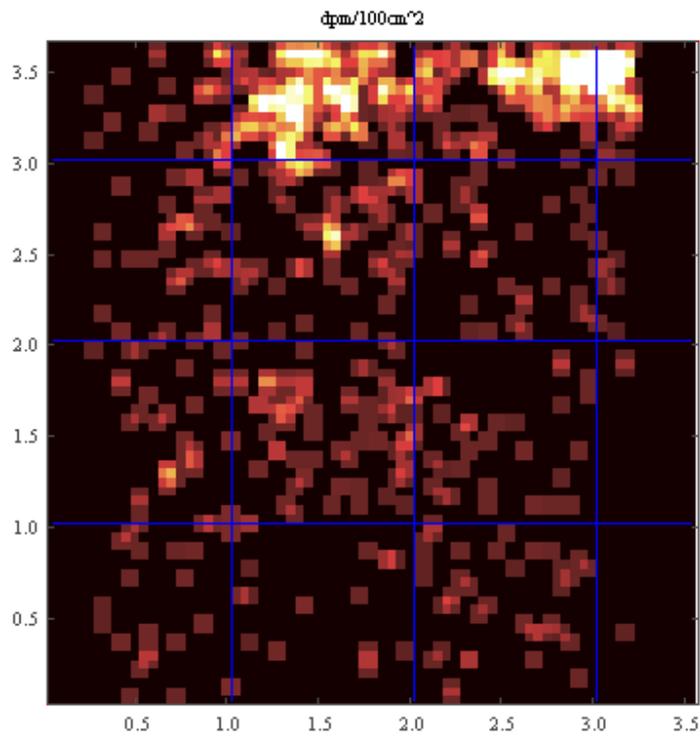


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

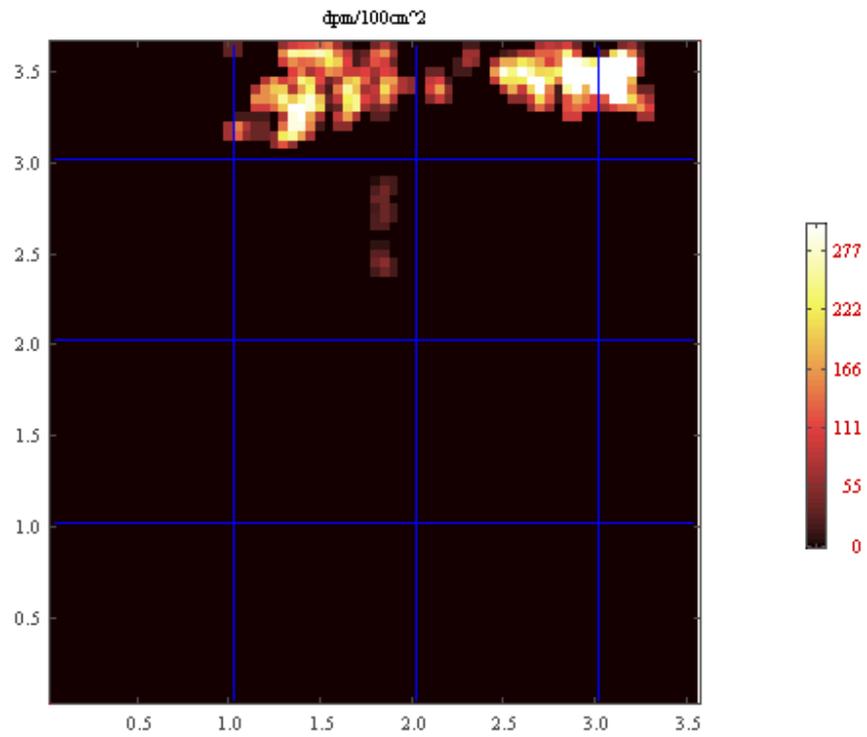


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

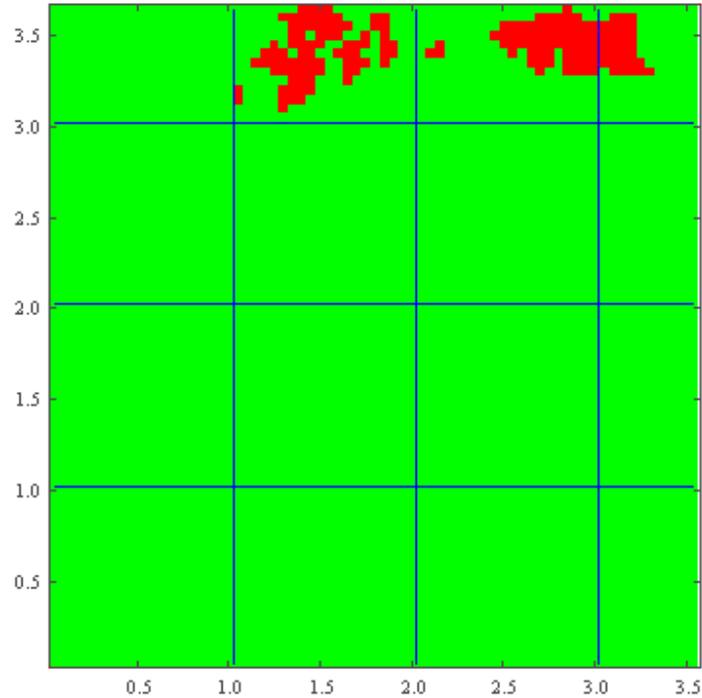


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	1108	1	(310,350)	(100,160)	N/A		
Spot	609	1	(295,350)	(85,160)	N/A		
Spot	361	3	(140,330)	(135,140)	N/A		
Spot	361	1	(315,335)	(105,145)	N/A		
Spot	343	1	(270,345)	(60,155)	N/A		
Spot	291	1	(250,350)	(40,160)	N/A		
Spot	272	3	(150,360)	(145,170)	N/A		
Spot	259	3	(165,340)	(160,150)	N/A		
Spot	255	3	(135,360)	(130,170)	N/A		
Spot	253	3	(135,315)	(130,125)	N/A		
Spot	245	3	(140,345)	(135,155)	N/A		
Spot	209	3	(185,340)	(180,150)	N/A		
Spot	197	3	(125,340)	(120,150)	N/A		
Spot	176	1	(290,335)	(80,145)	N/A		
Spot	168	3	(165,325)	(160,135)	N/A		
Spot	166	1	(215,340)	(5,150)	N/A		
Spot	164	3	(185,360)	(180,170)	N/A		
Spot	149	3	(105,320)	(100,130)	N/A		
Spot	145	1	(280,360)	(70,170)	N/A		
Spot	132	1	(270,330)	(60,140)	N/A		
Spot	110	3	(165,355)	(160,165)	N/A		
Spot	110	1	(330,330)	(120,140)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4801B
Survey Date:	February 9, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	1,631 dpm/100 cm²
Area Exceeding 100 cm² Levels:	1.35 m ²

This survey is not position correlated.

Primary Detector:

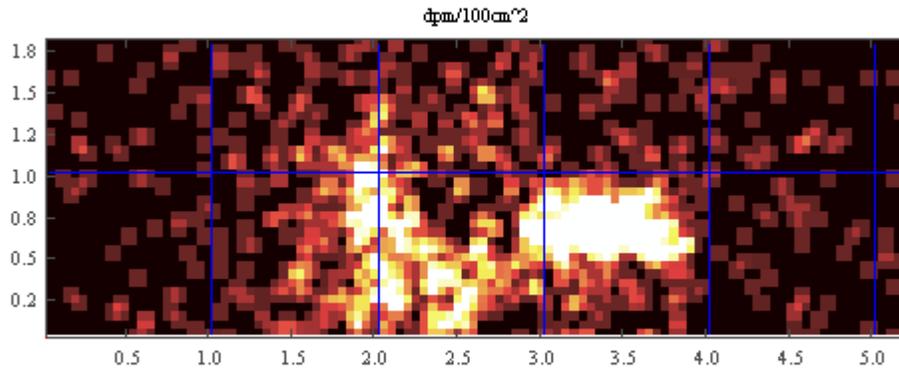


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

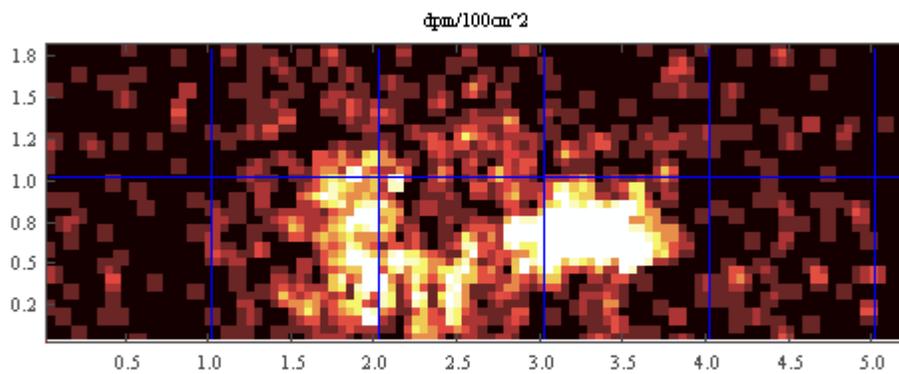


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

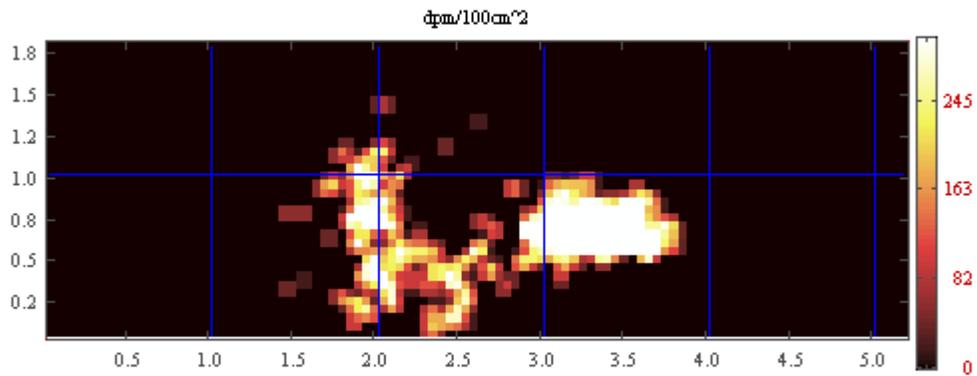


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

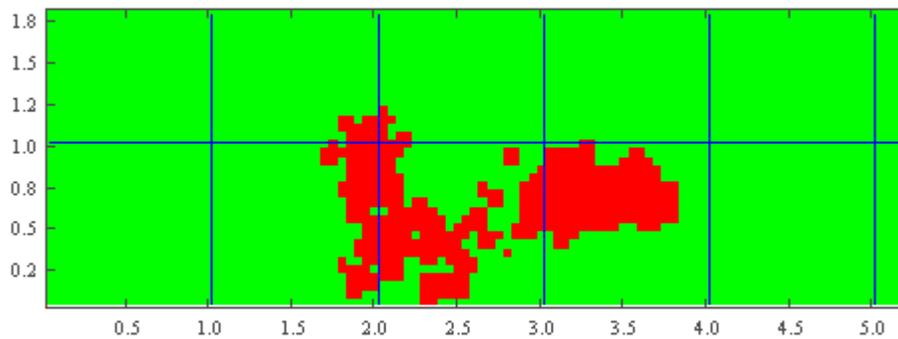


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	1631	69	(340,65)	(5,60)	N/A		
Spot	1339	73	(355,60)	(0,55)	N/A		
Spot	876	67	(325,65)	(0,60)	N/A		
Spot	780	61	(295,65)	(0,60)	N/A		
Spot	657	73	(355,80)	(0,75)	N/A		
Spot	624	63	(310,65)	(5,60)	N/A		
Spot	568	41	(200,75)	(5,70)	N/A		
Spot	562	67	(325,80)	(0,75)	N/A		
Spot	515	69	(340,80)	(5,75)	N/A		
Spot	449	75	(370,60)	(5,55)	N/A		
Spot	381	41	(200,100)	(5,95)	N/A		
Spot	371	63	(310,80)	(5,75)	N/A		
Spot	332	39	(185,75)	(0,70)	N/A		
Spot	329	41	(200,45)	(5,40)	N/A		
Spot	329	51	(245,40)	(0,35)	N/A		
Spot	313	39	(190,60)	(5,55)	N/A		
Spot	304	45	(215,55)	(0,50)	N/A		
Spot	287	53	(260,55)	(5,50)	N/A		
Spot	282	43	(210,30)	(5,25)	N/A		
Spot	TERM		(,)	(,)	N/A		
Grid	82	N/A	N/A	N/A	(3,1)		
Grid	169	N/A	N/A	N/A	(4,1)		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4811A
Survey Date:	February 9, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

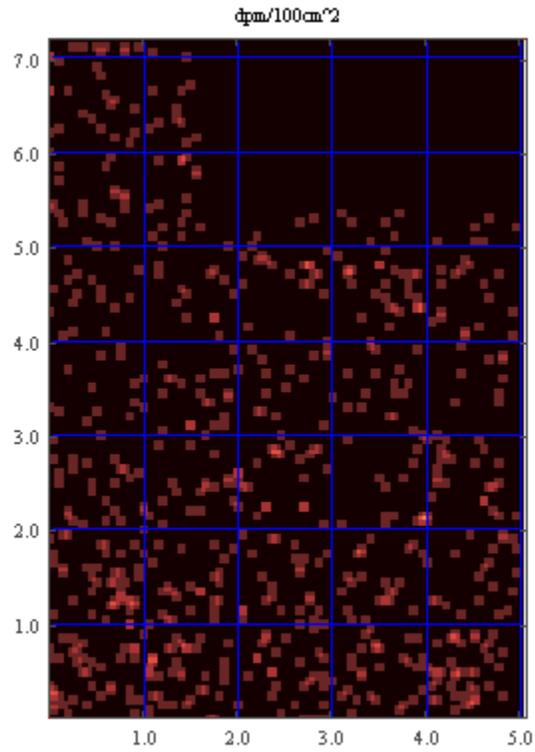


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

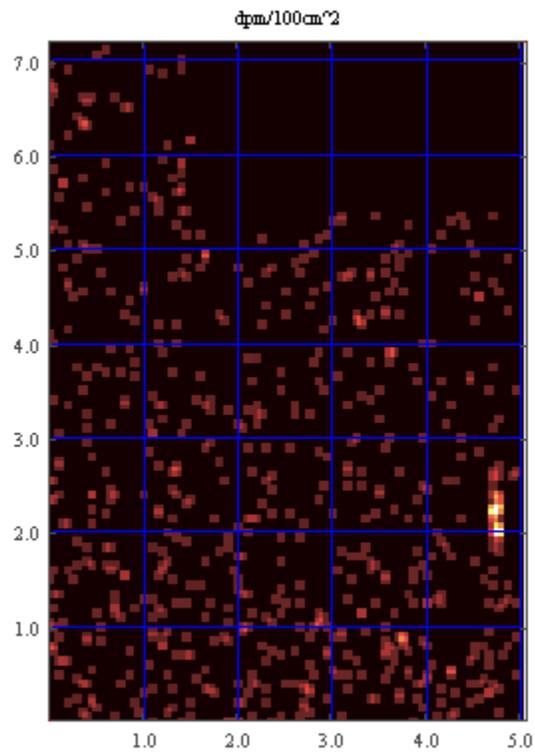


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

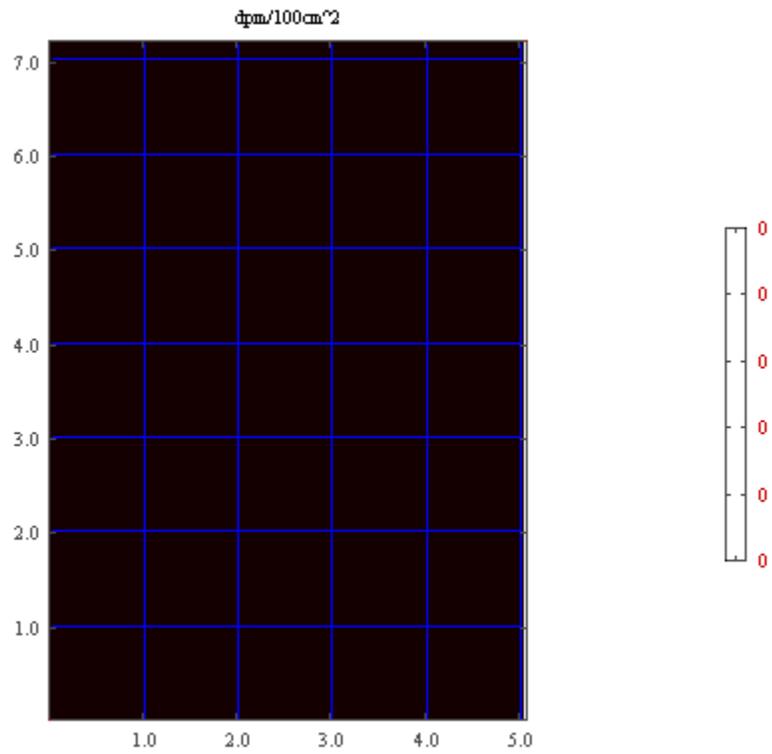


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4821A
Survey Date:	February 10, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

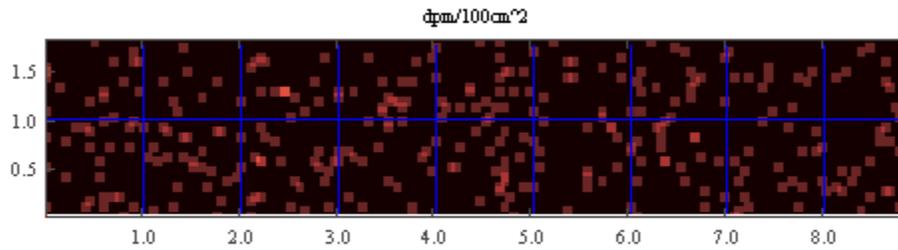


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

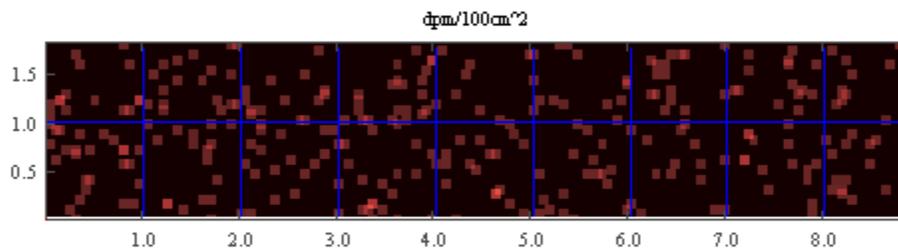


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA4831A
Survey Date:	March 1, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	115 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

This survey is not position correlated.

Primary Detector:

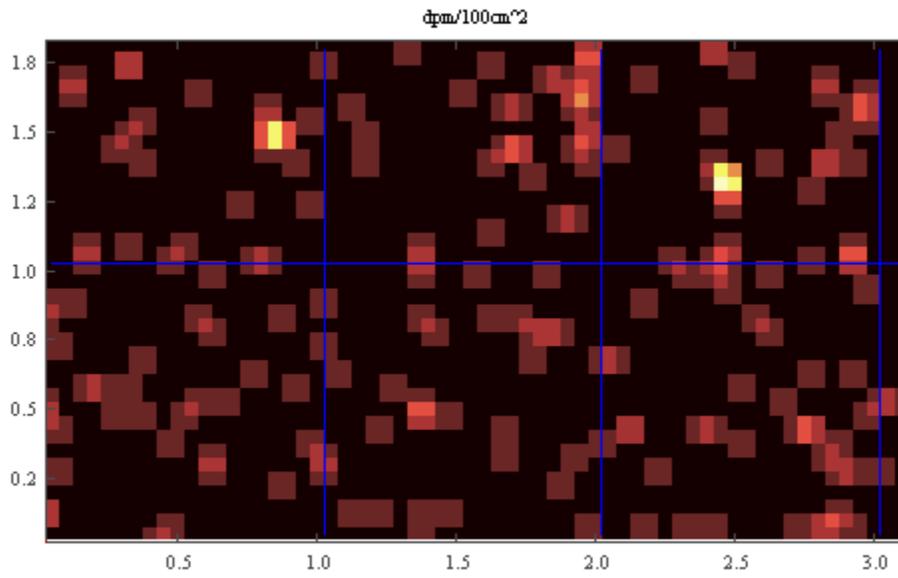


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

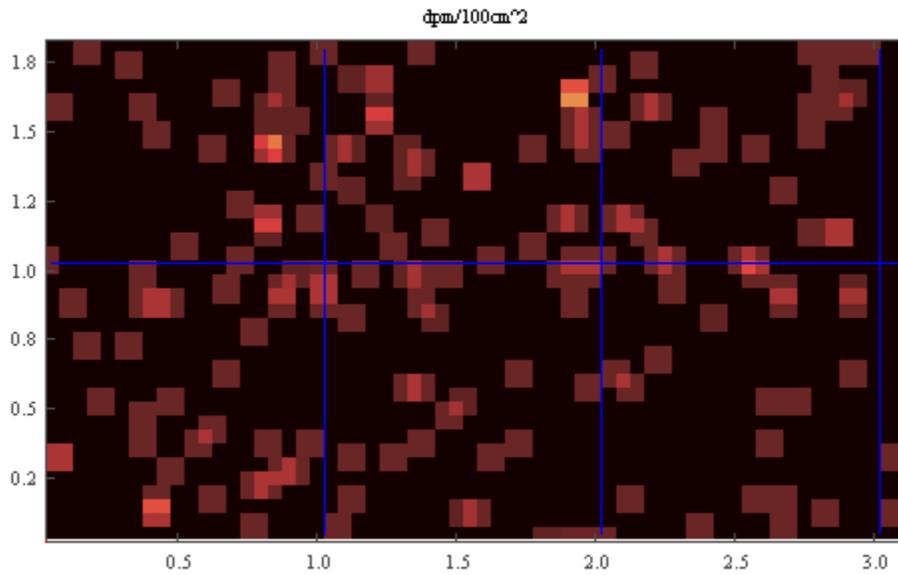


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

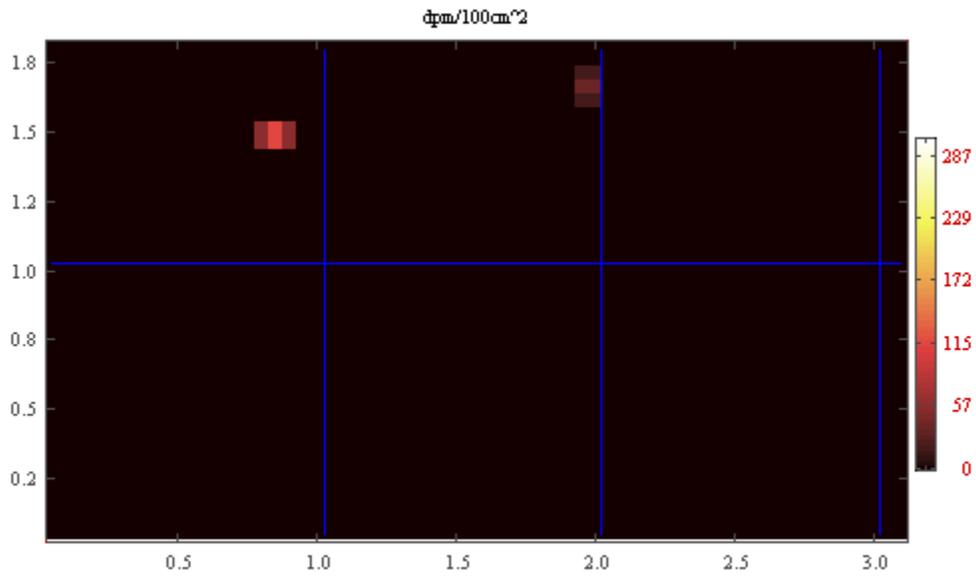


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

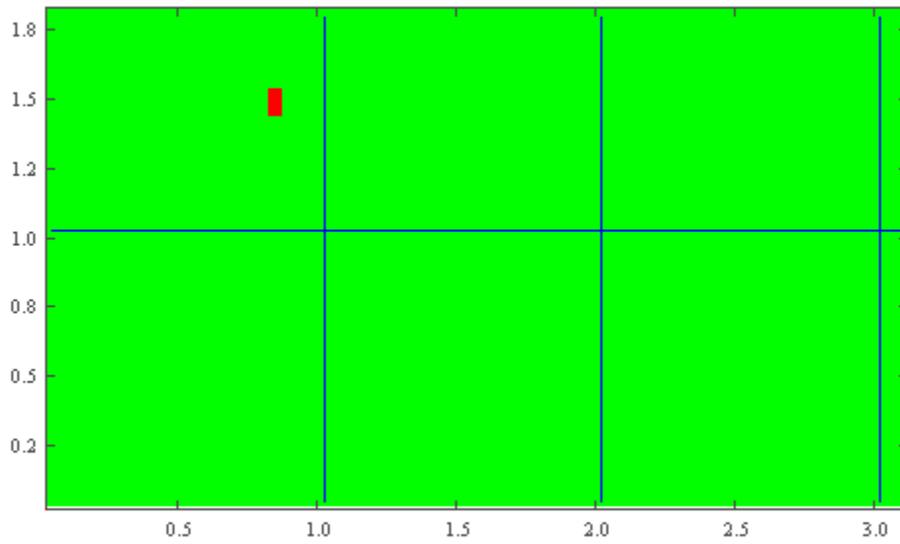


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	115	80	(85,145)	(0,50)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA4901A
Survey Date:	February 8, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

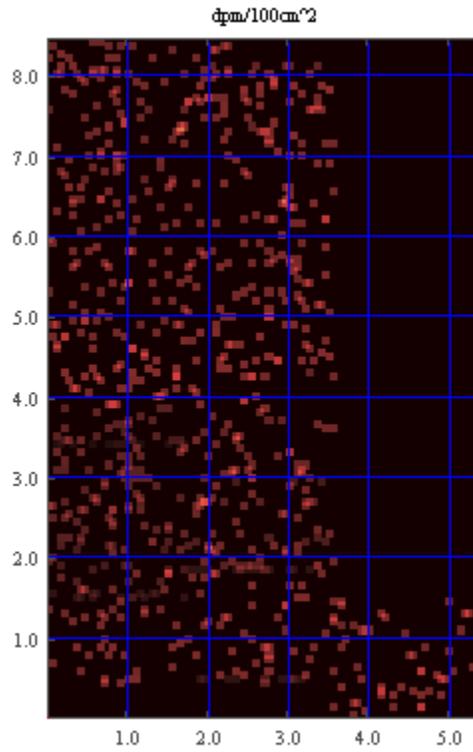


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

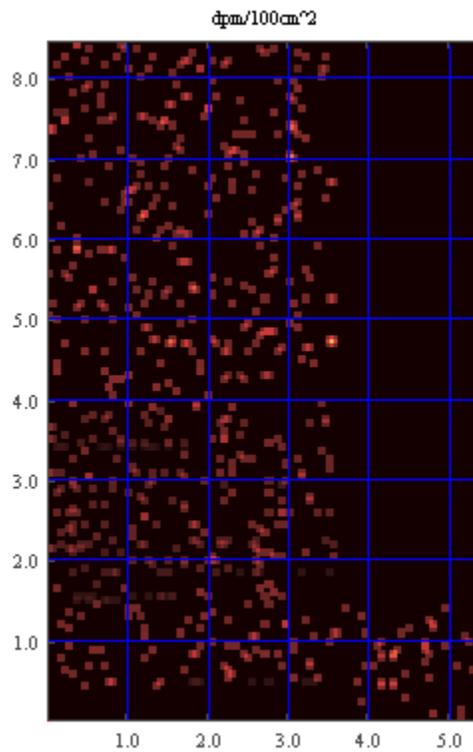


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

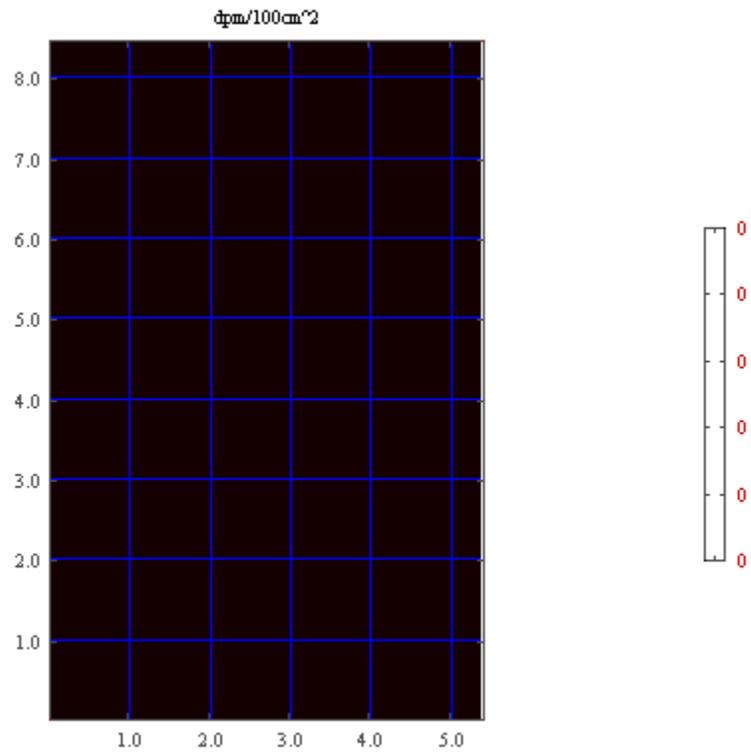


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4901B
Survey Date:	February 10, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

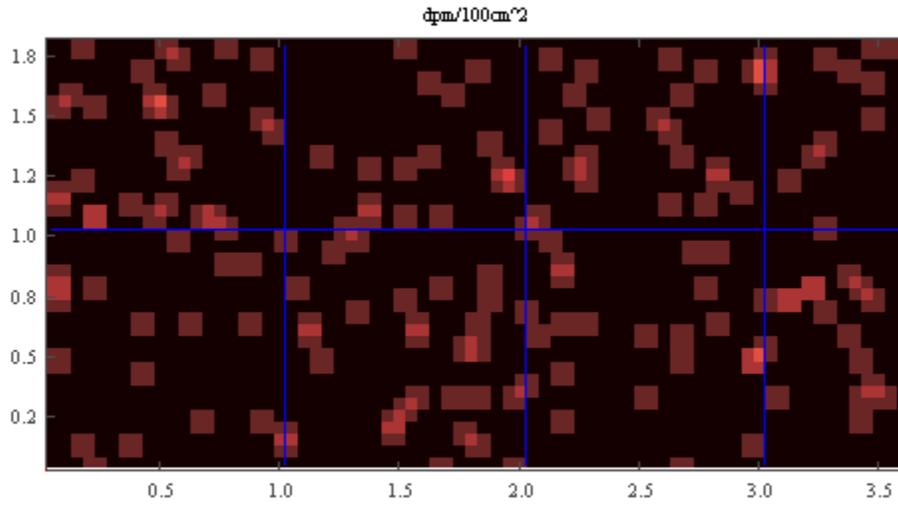


Figure 1: Meter Grid overlaid onto image plot of 100cm^2 areas..

Recount Detector:

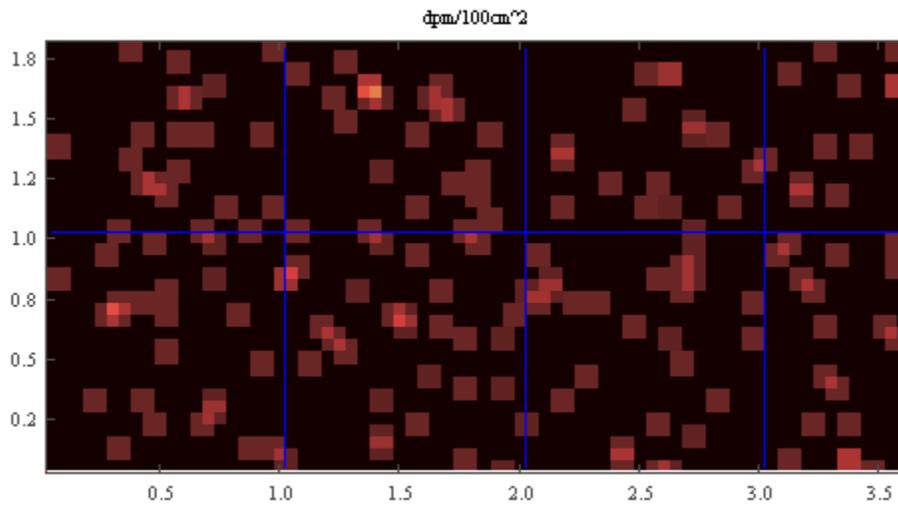


Figure 2: Meter Grid overlaid onto image plot of 100cm^2 areas..

Coincidence Logic:

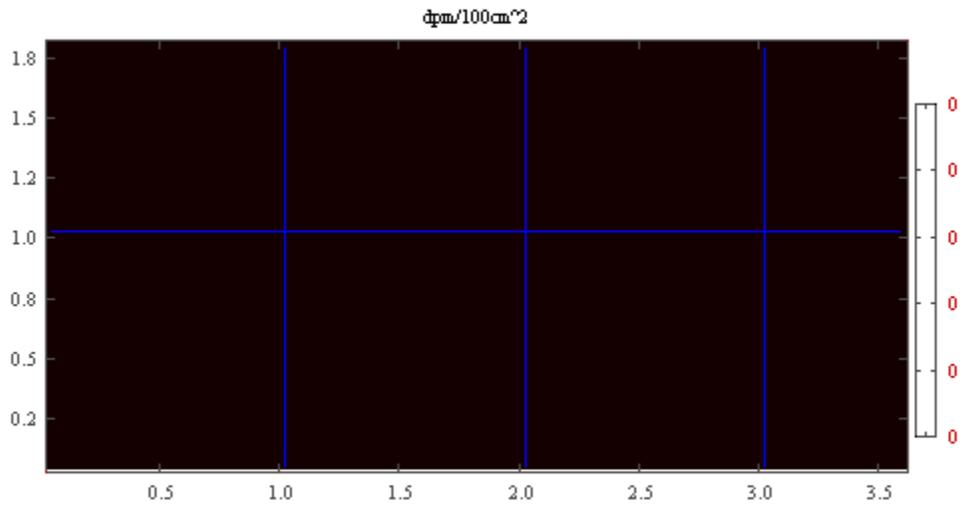


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4901C
Survey Date:	February 11, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

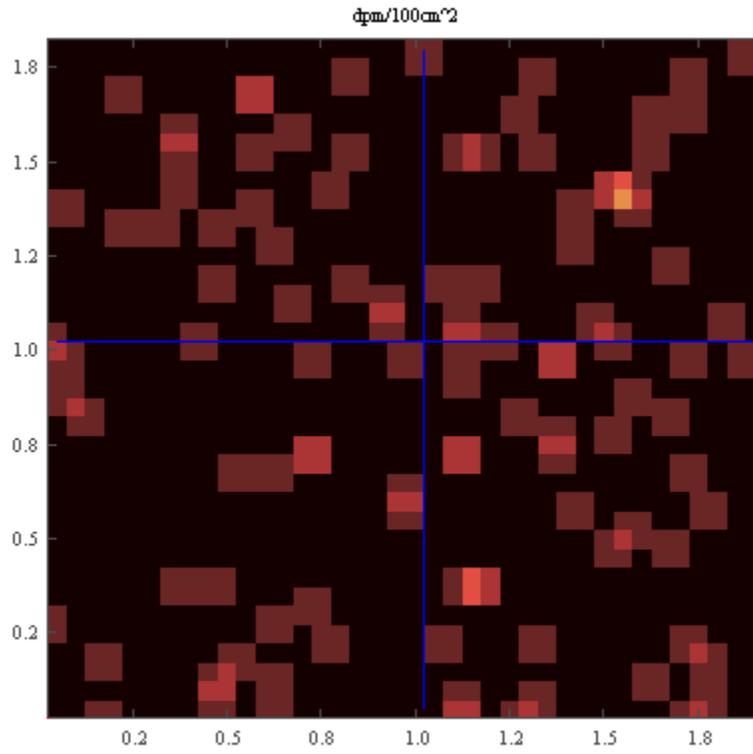


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

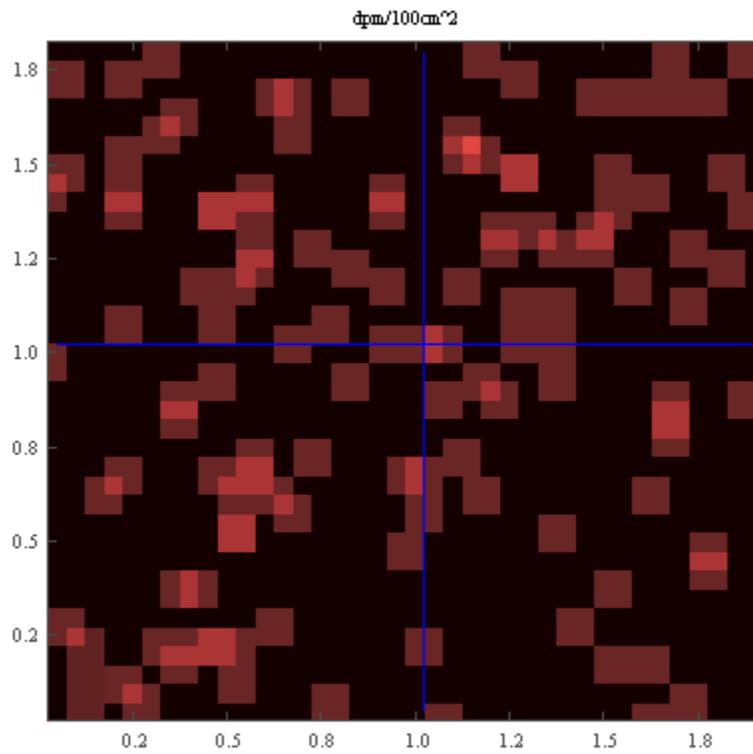


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

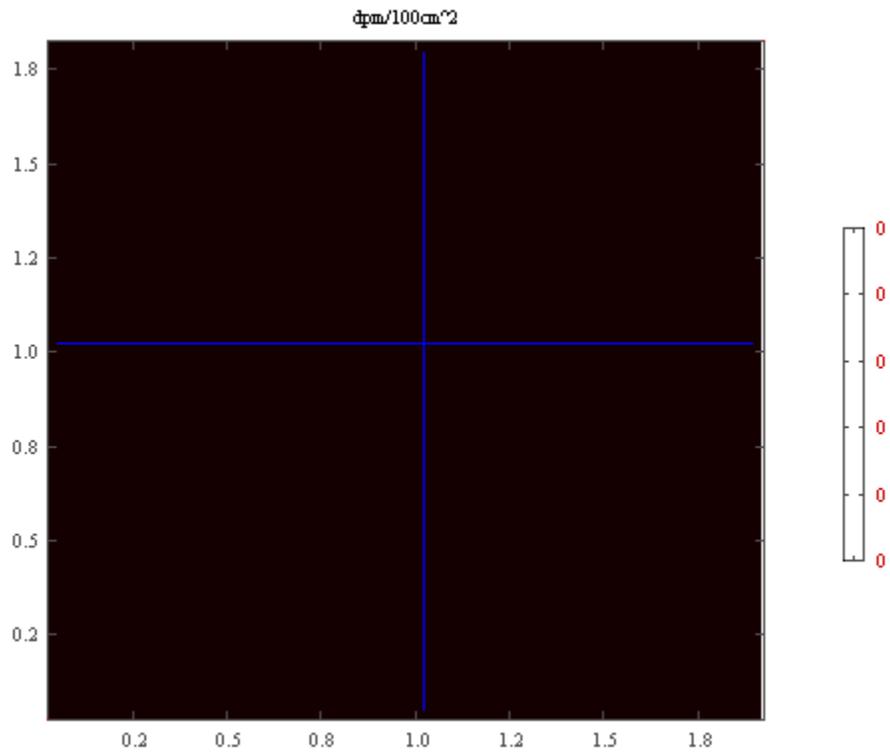


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4911A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

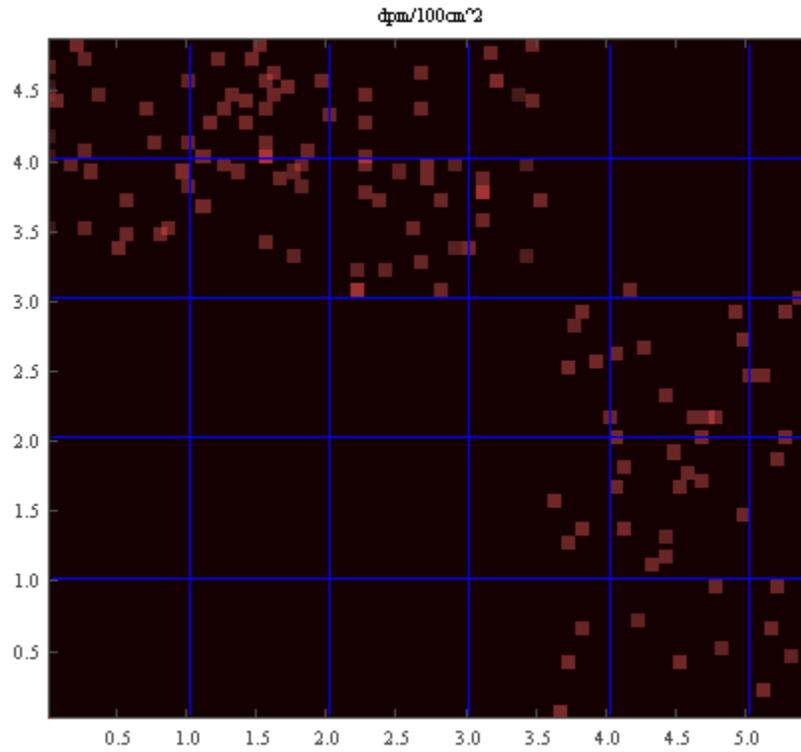


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

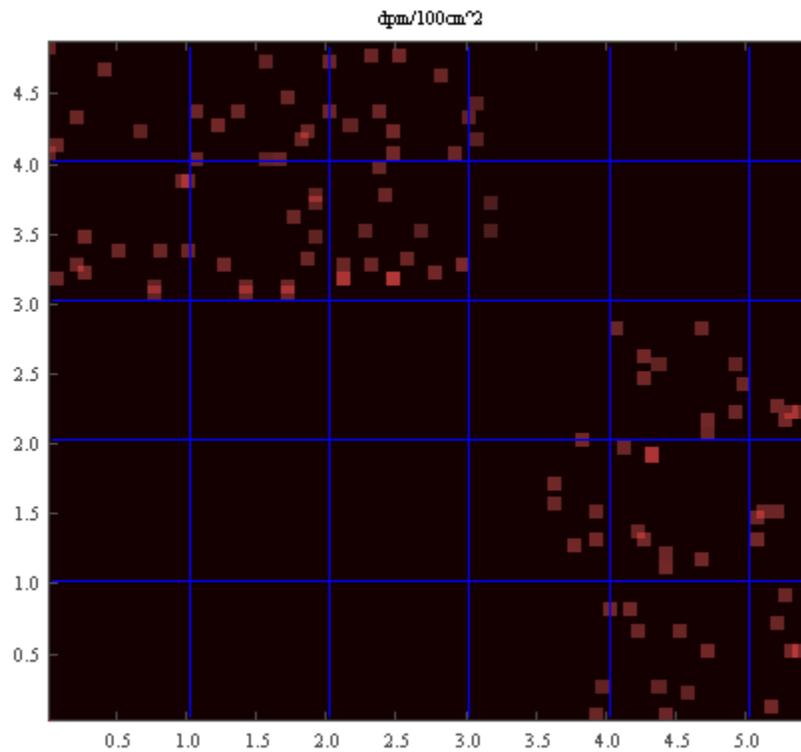


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

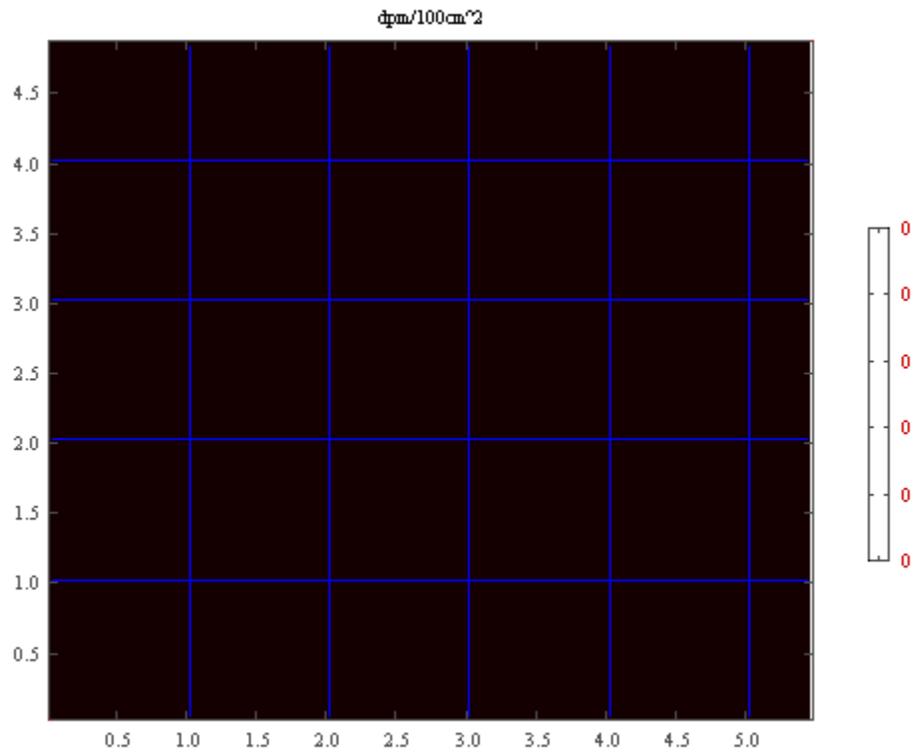


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4911B
Survey Date:	February 15, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

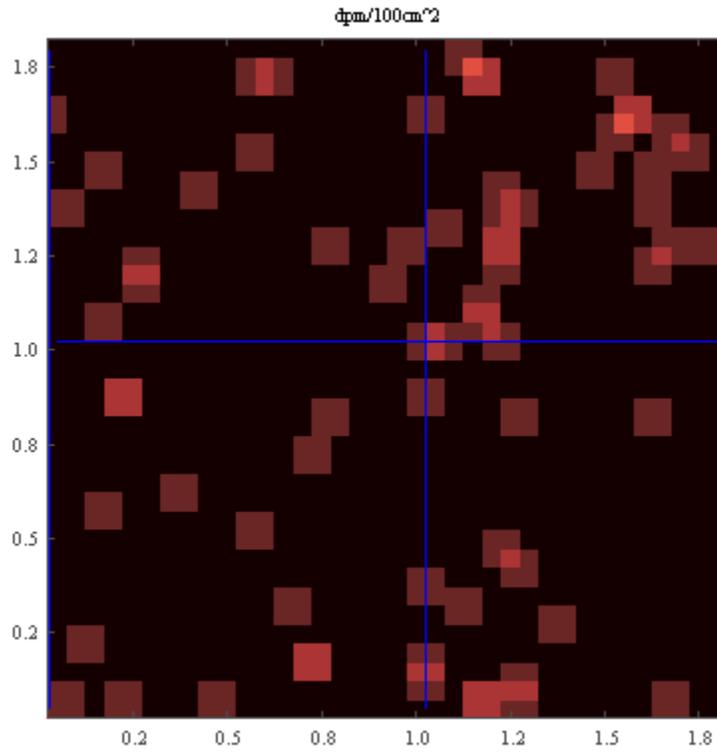


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

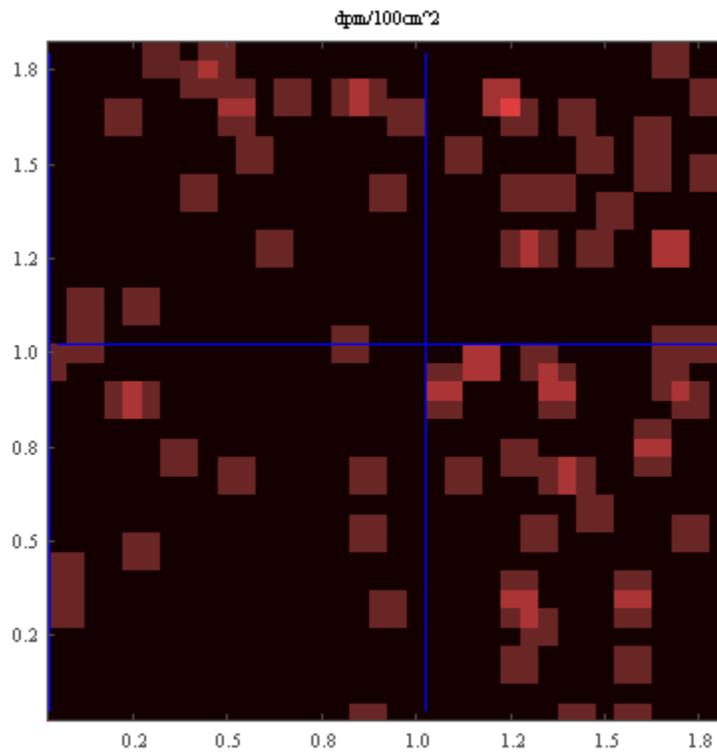


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

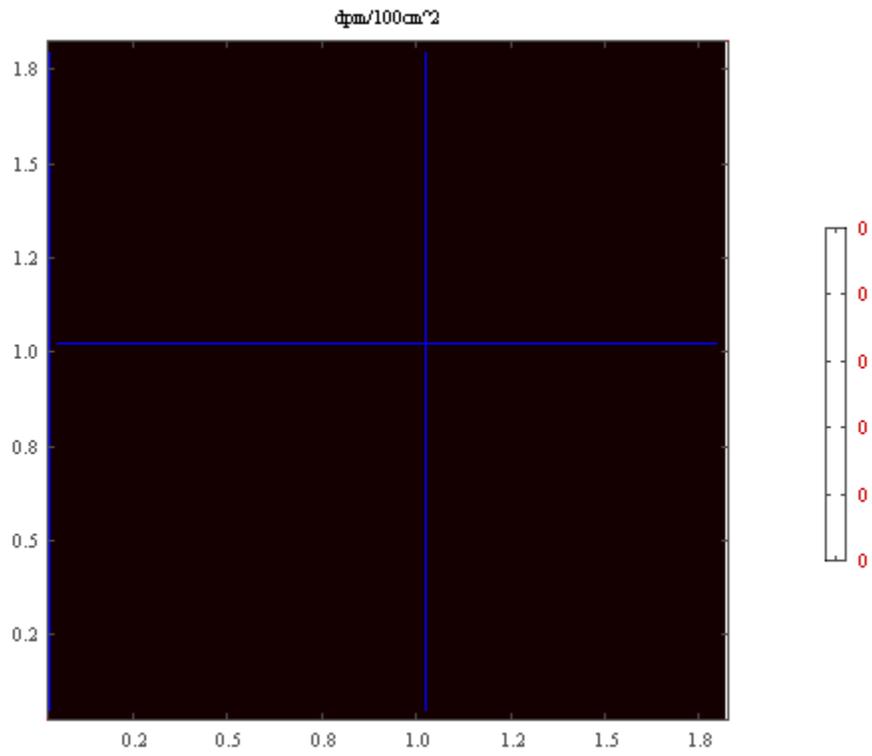


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4911C
Survey Date:	March 1, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

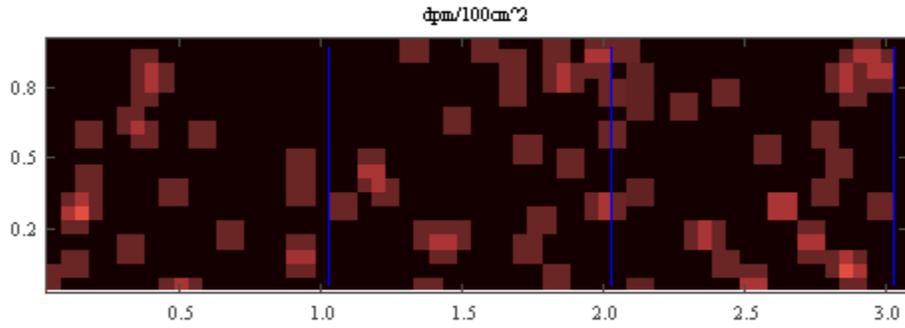


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

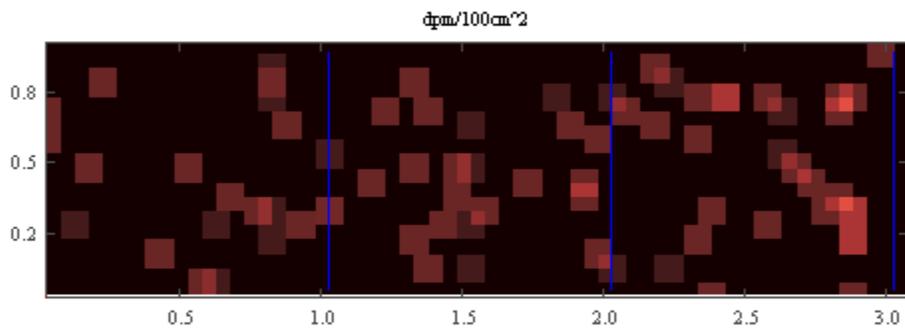


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

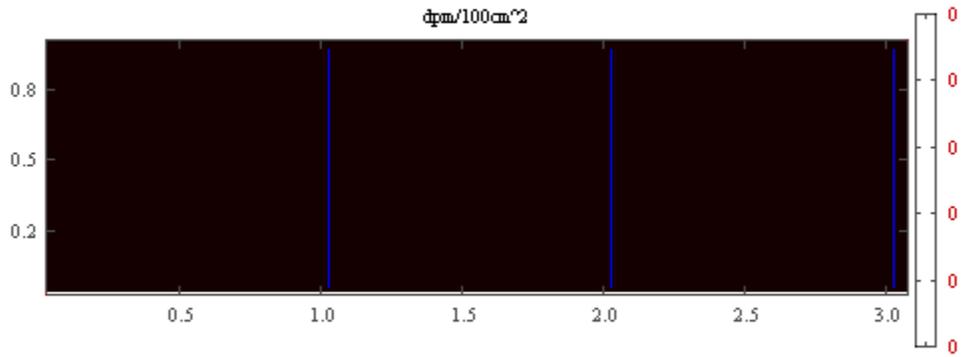


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4911E
Survey Date:	February 24, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

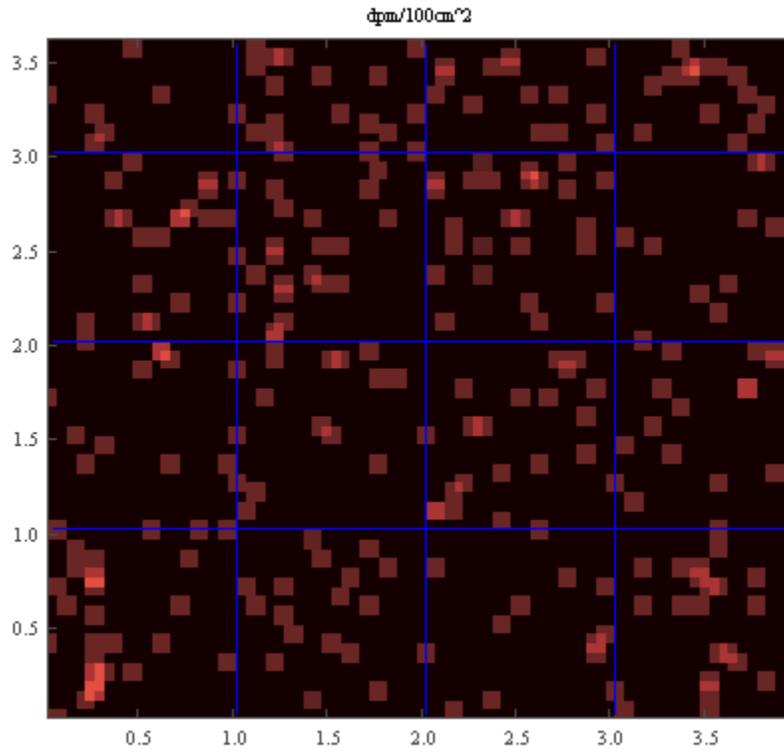


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

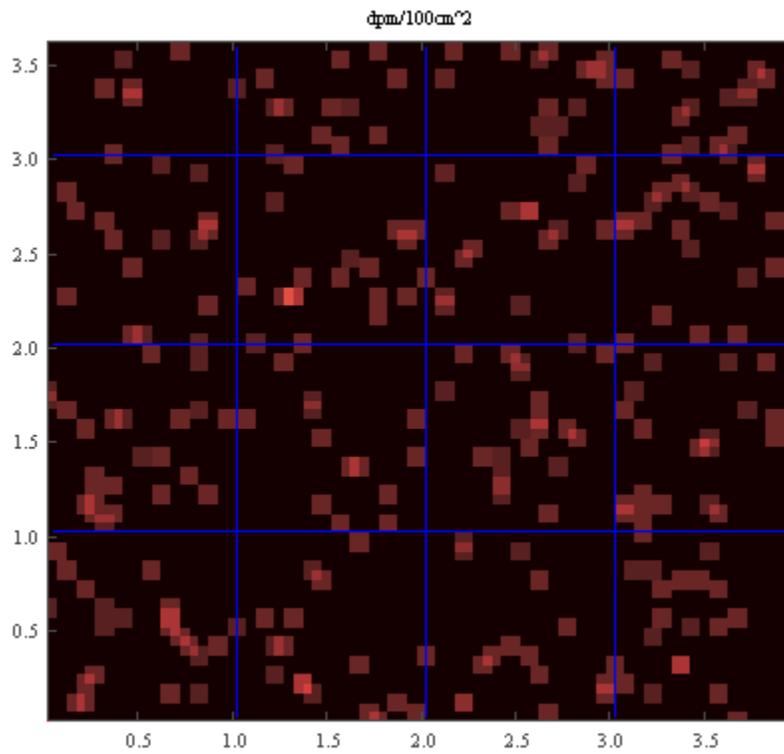


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

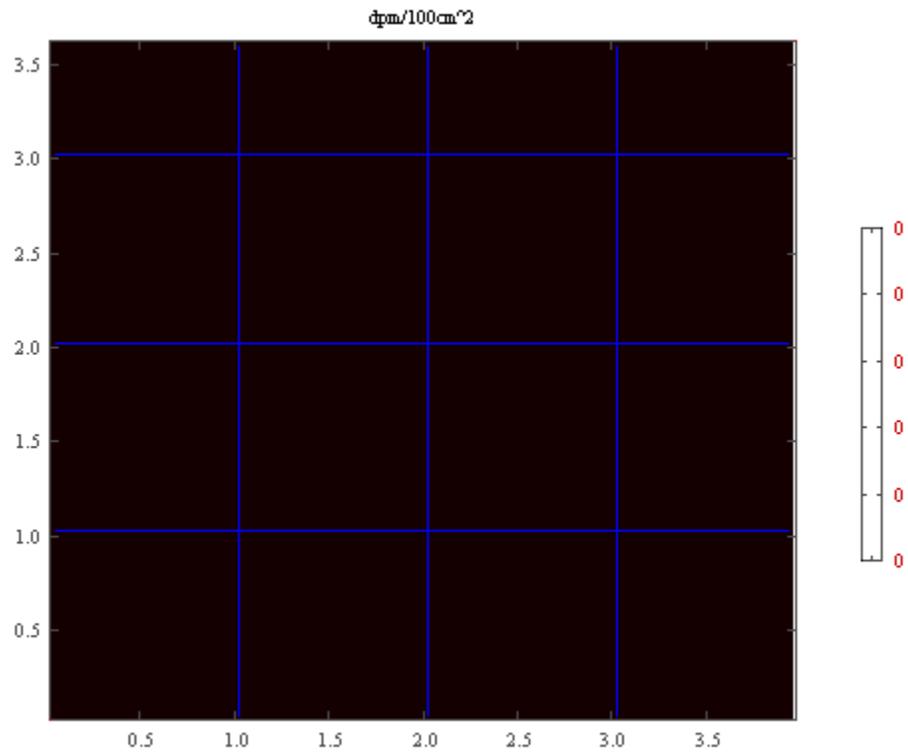


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4921A
Survey Date:	February 17, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

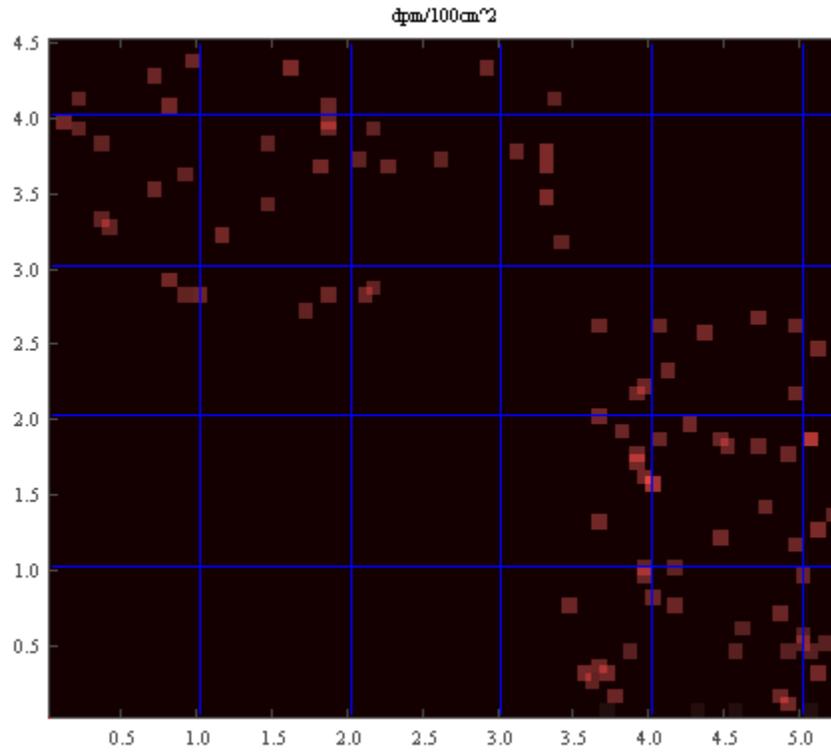


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

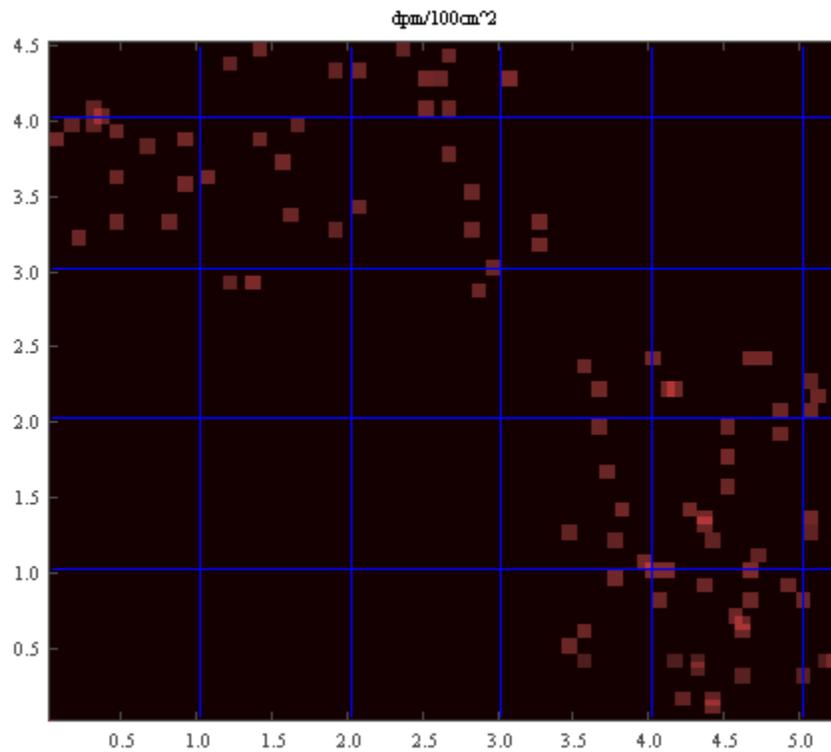


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

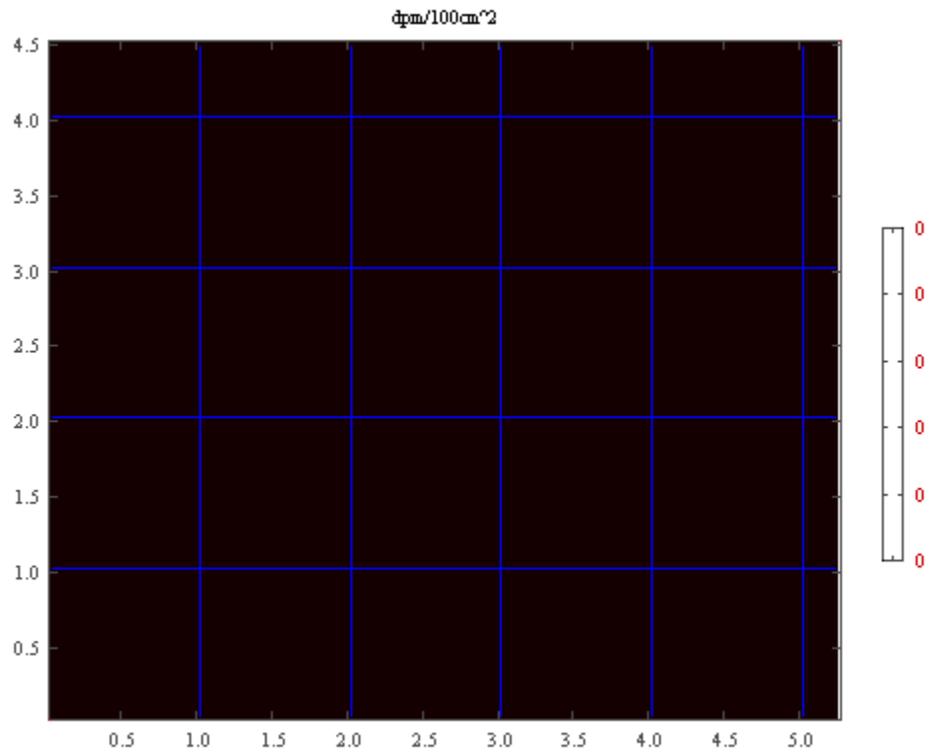


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA4931A
Survey Date:	March 1, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	410 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.04 m ²

This survey is not position correlated.

Primary Detector:

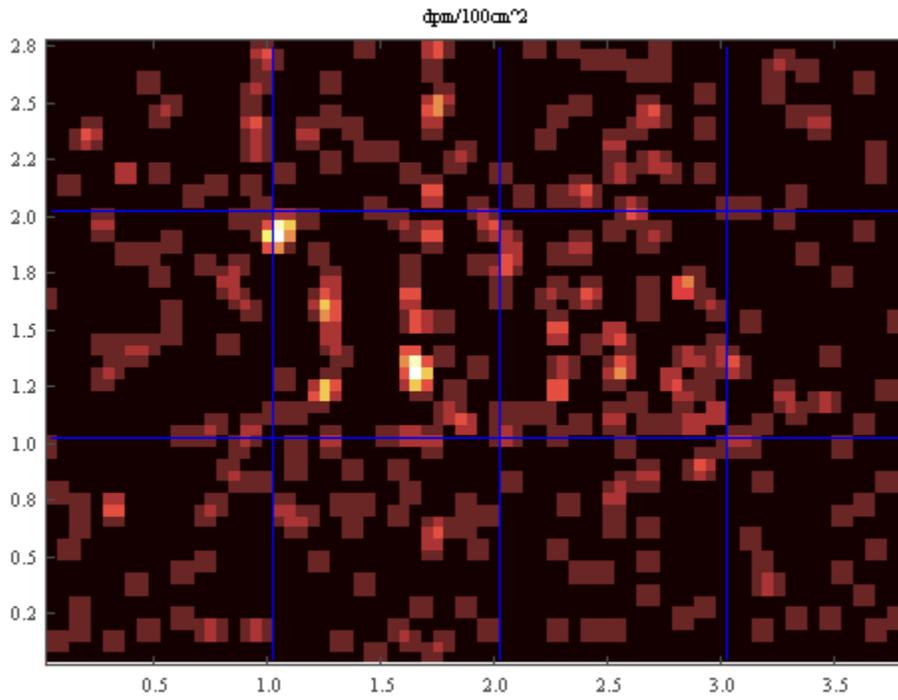


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

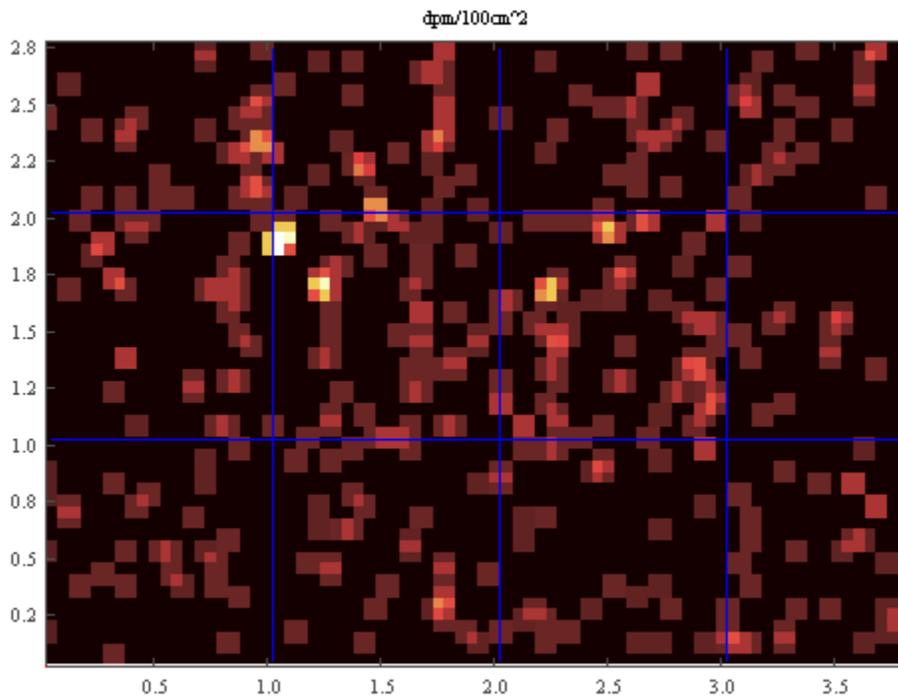


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

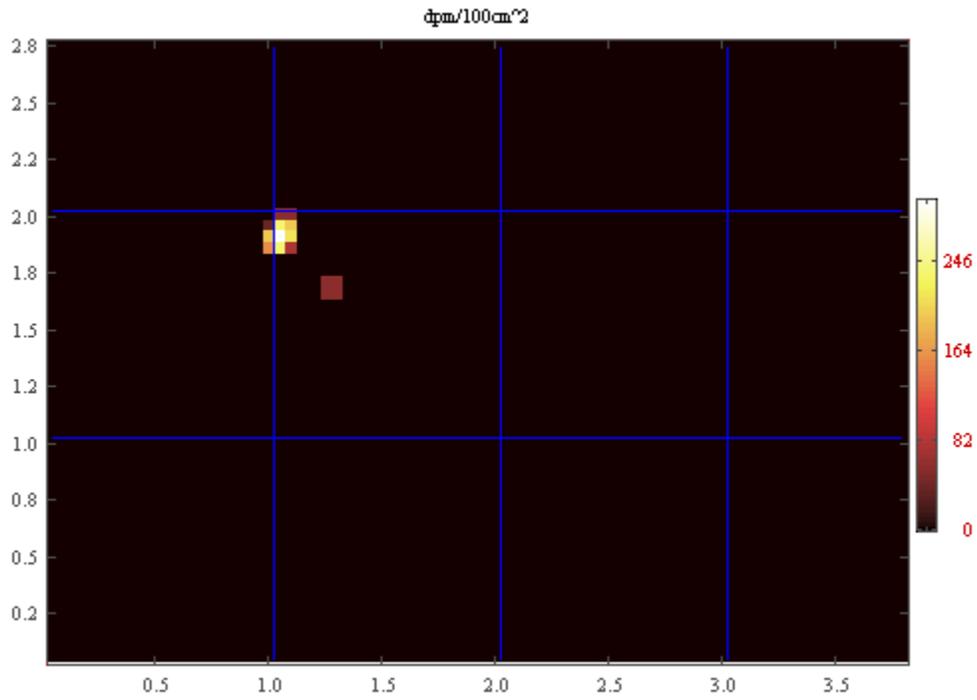


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

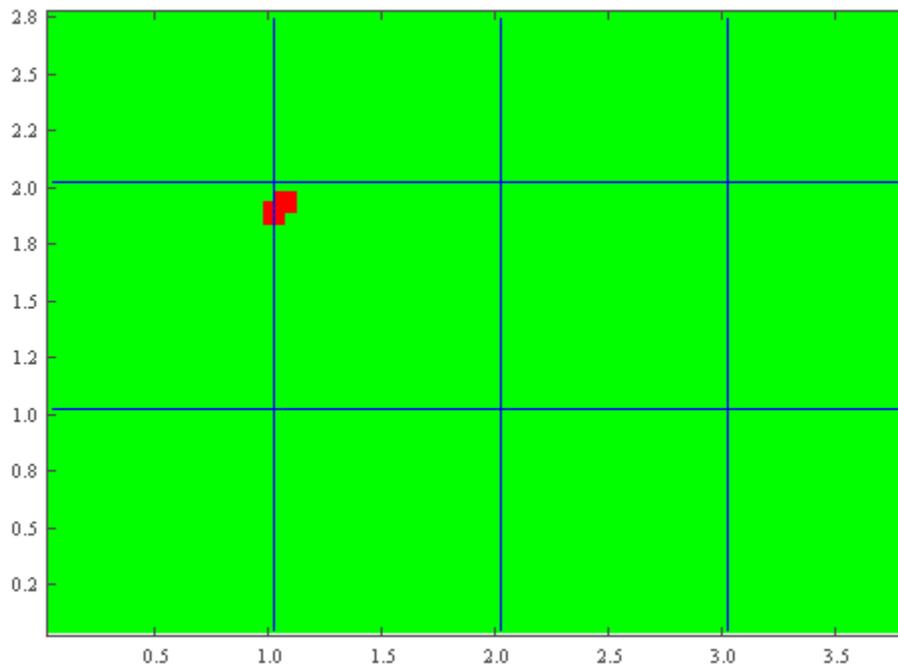


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	410	174	(105,190)	(0,0)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5001A
Survey Date:	February 11, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	106 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.01 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

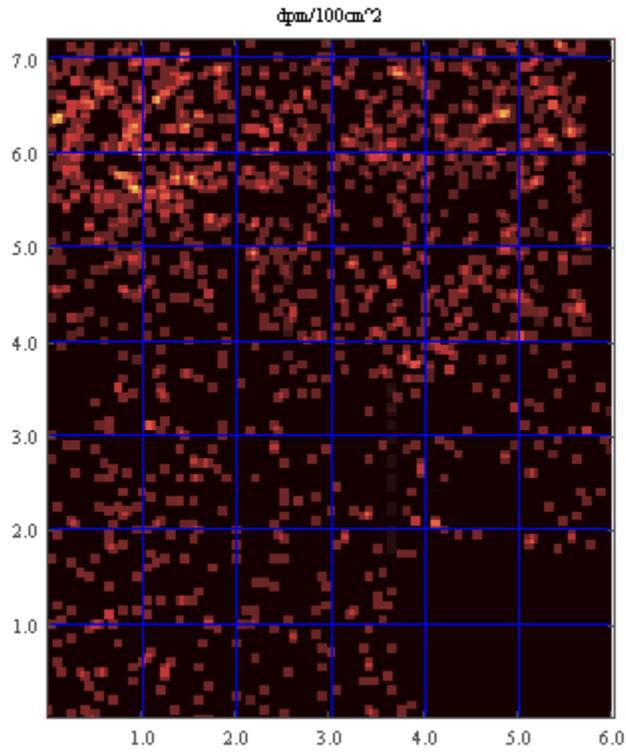


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

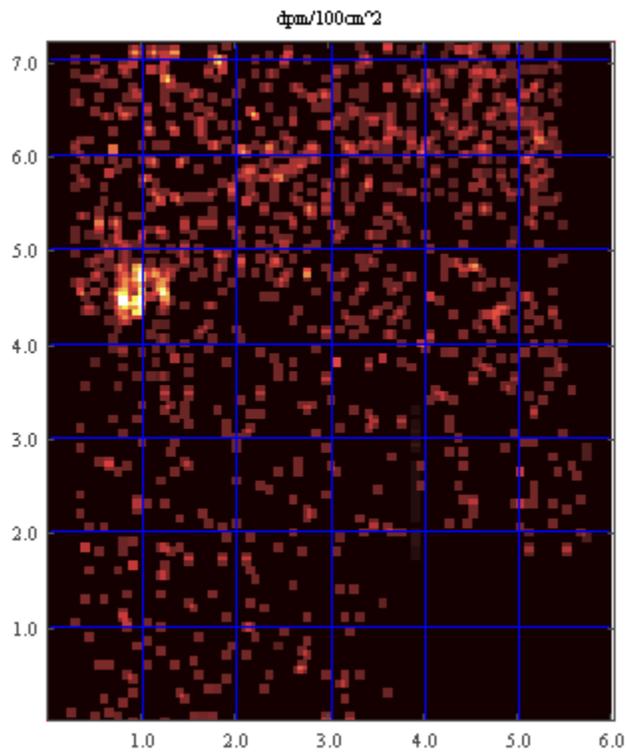


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

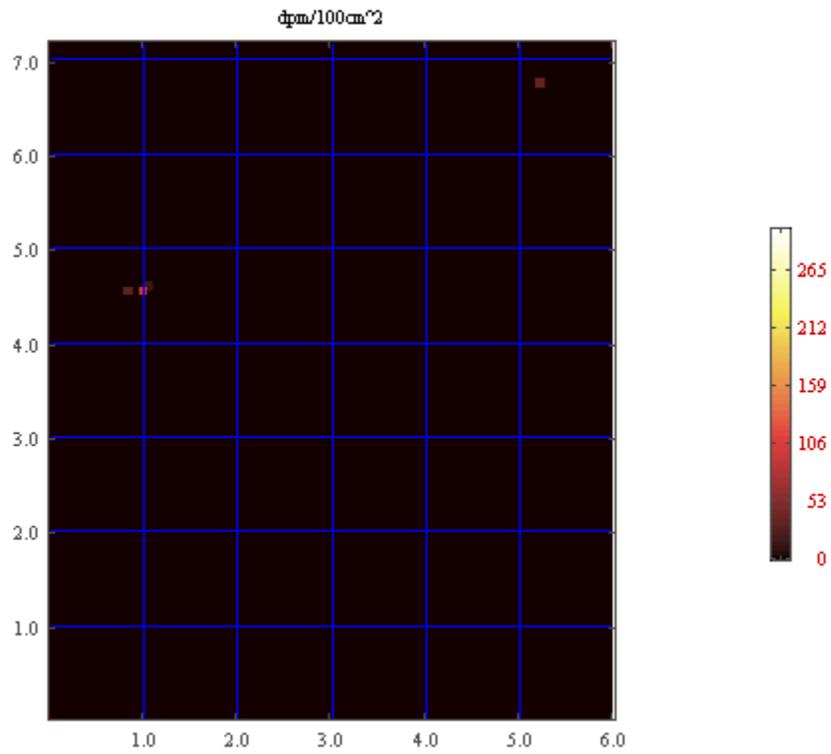


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	106	4	(105,460)	(95,100)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5001B
Survey Date:	February 15, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	214 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.06 m ²

This survey is not position correlated.

Primary Detector:

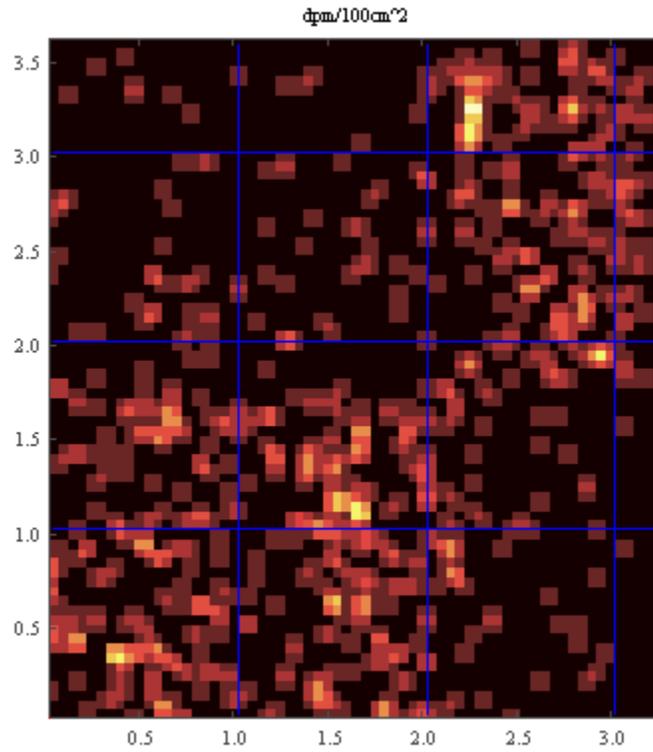


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

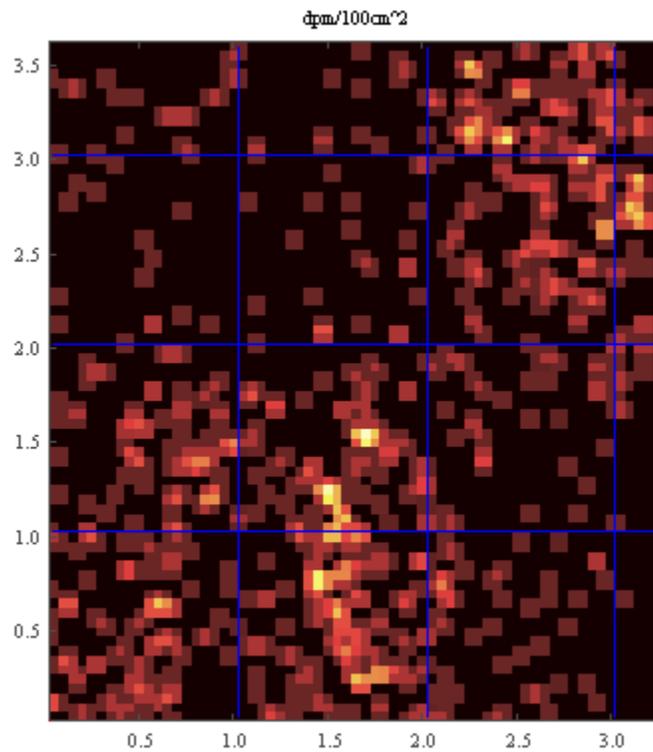


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

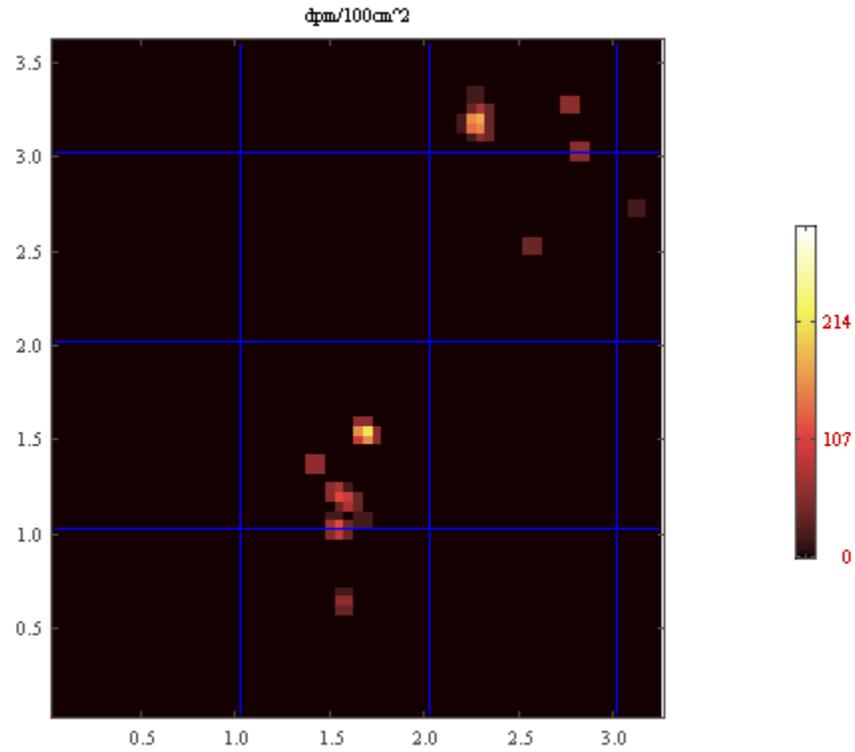


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

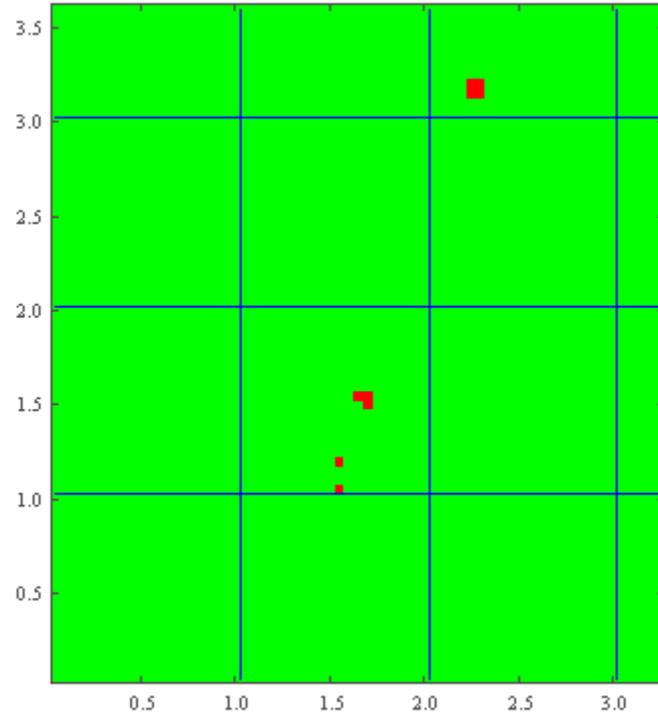


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	214	34	(170,155)	(5,150)	N/A		
Spot	174	108	(230,320)	(5,135)	N/A		
Spot	114	32	(155,120)	(0,115)	N/A		
Spot	112	32	(155,105)	(0,100)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5011A
Survey Date:	February 15, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

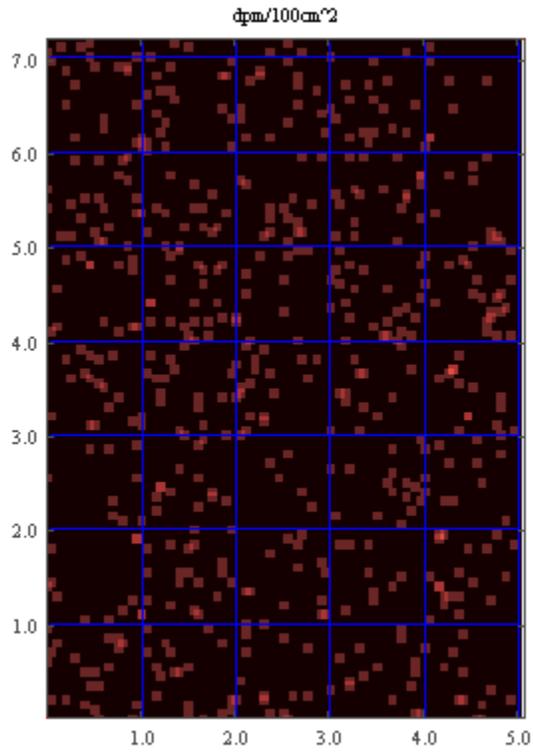


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

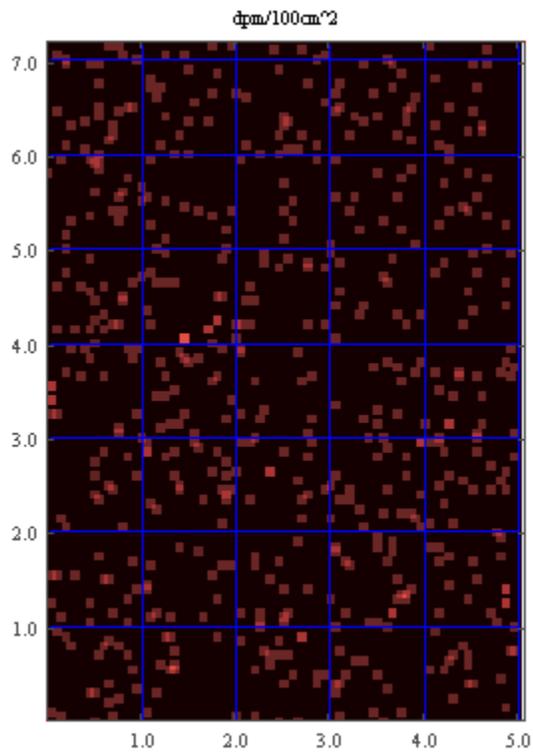


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

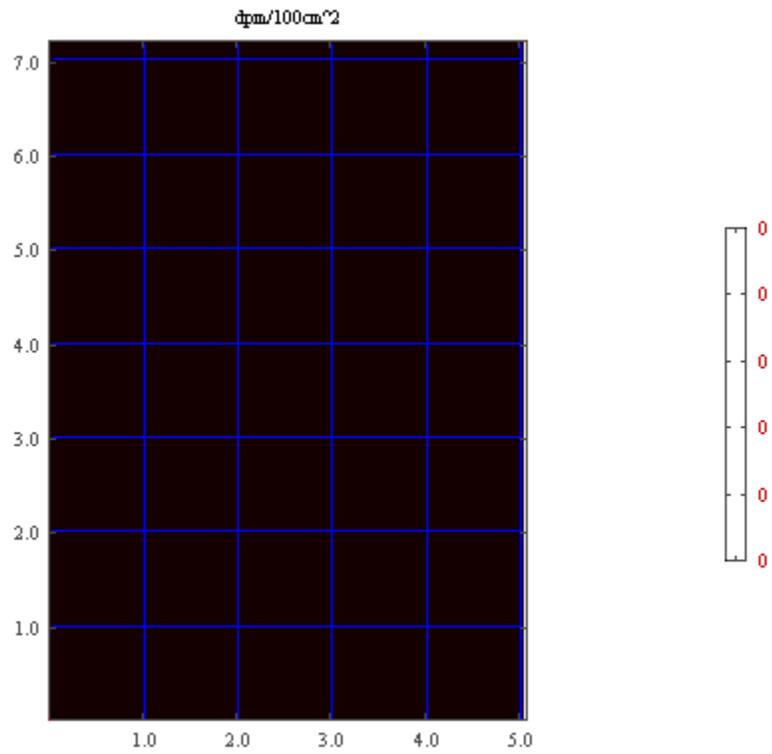


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5011B
Survey Date:	March 4, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

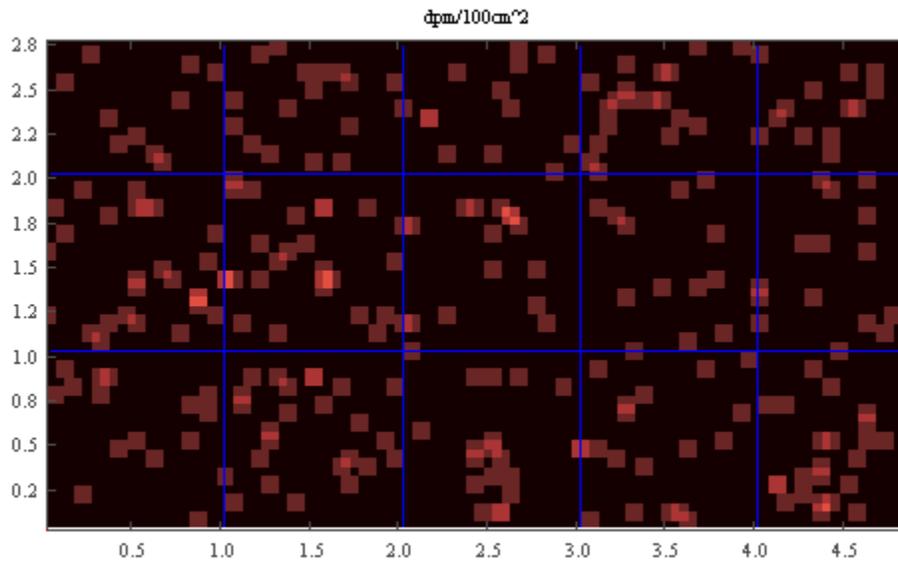


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

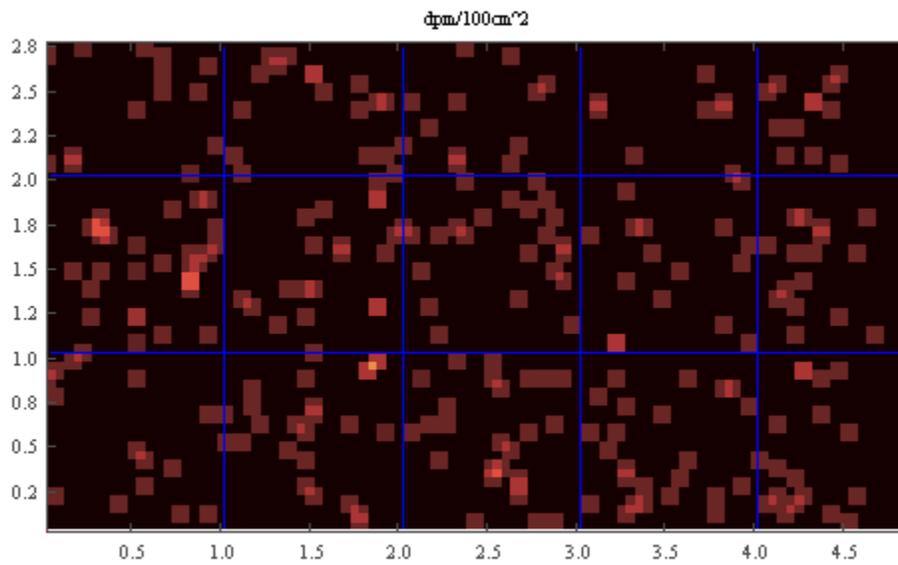


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

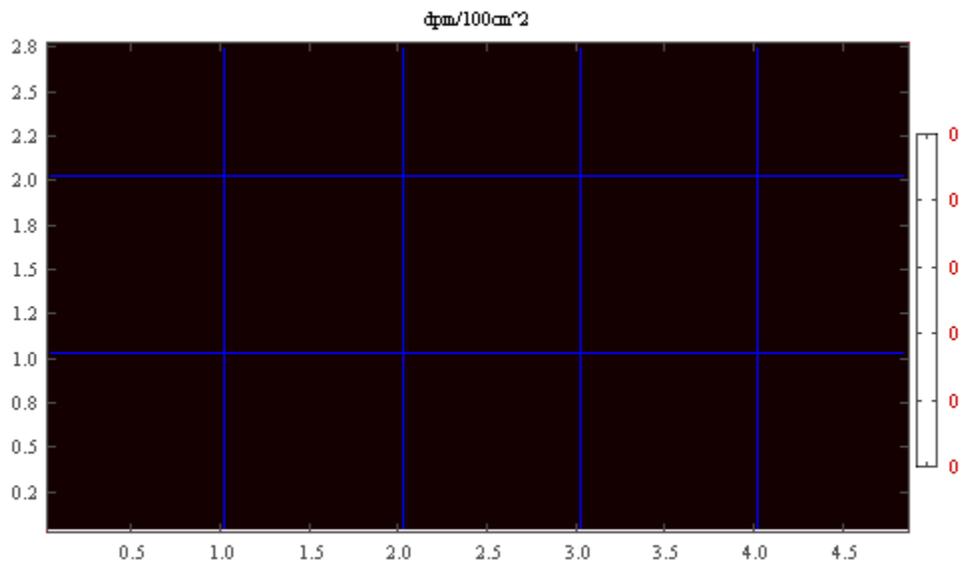


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5021A
Survey Date:	February 15, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

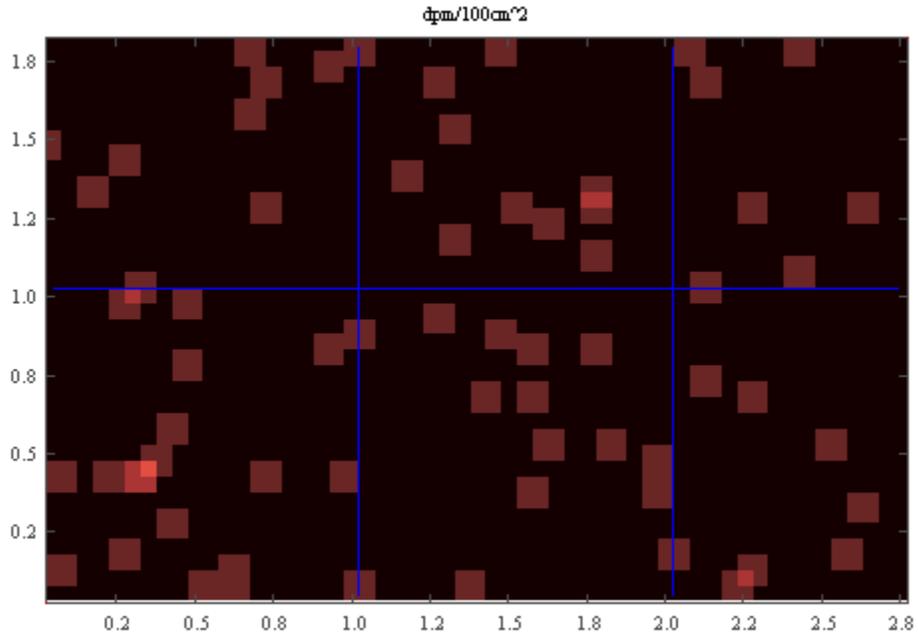


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

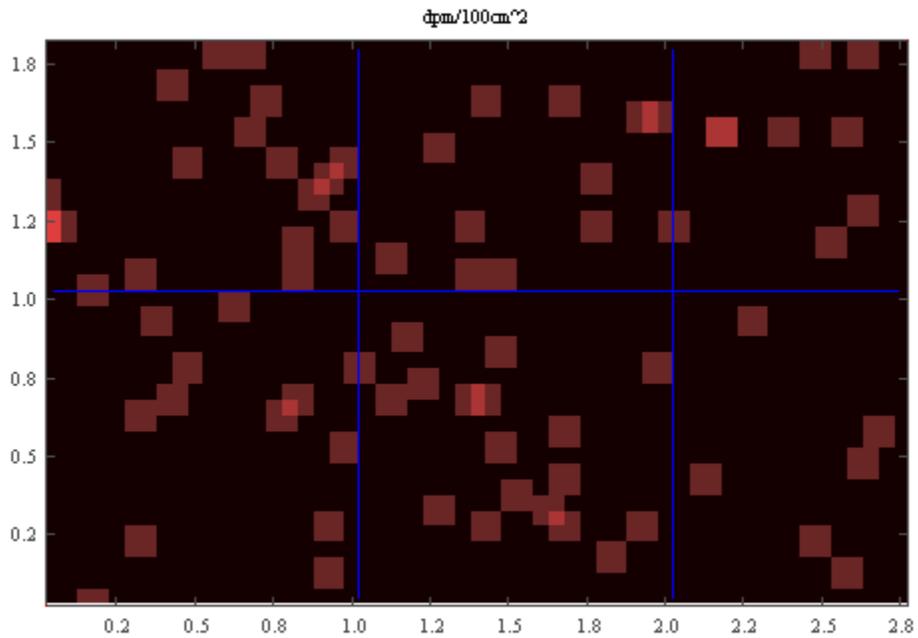


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

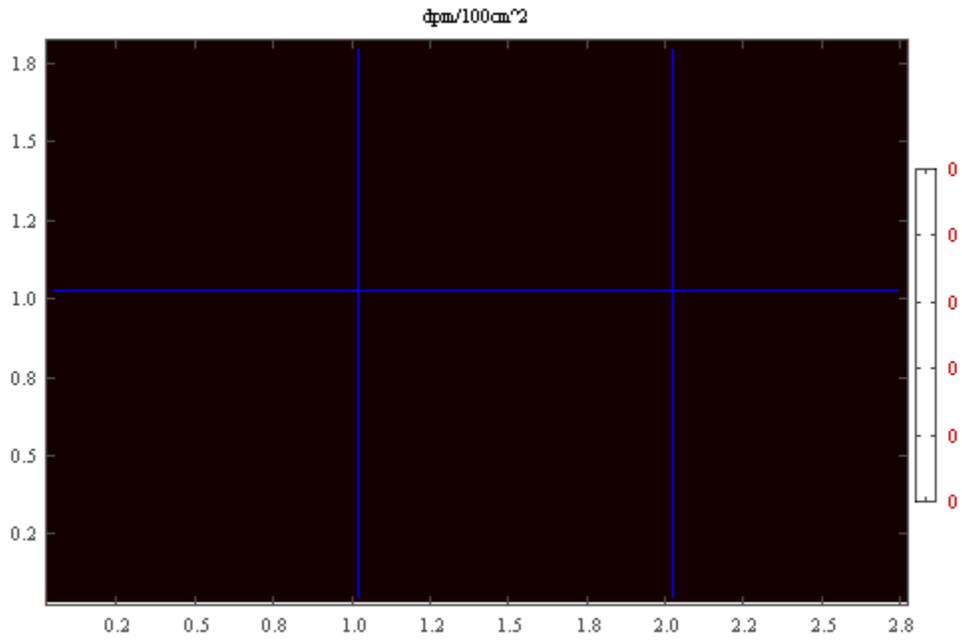


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5031A
Survey Date:	February 16, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

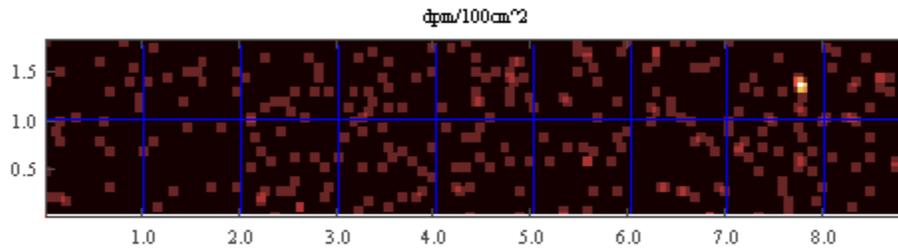


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

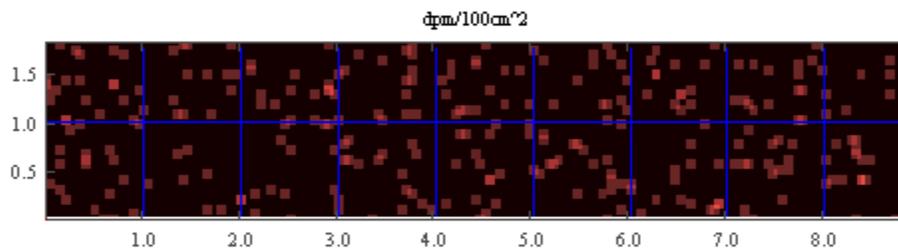


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

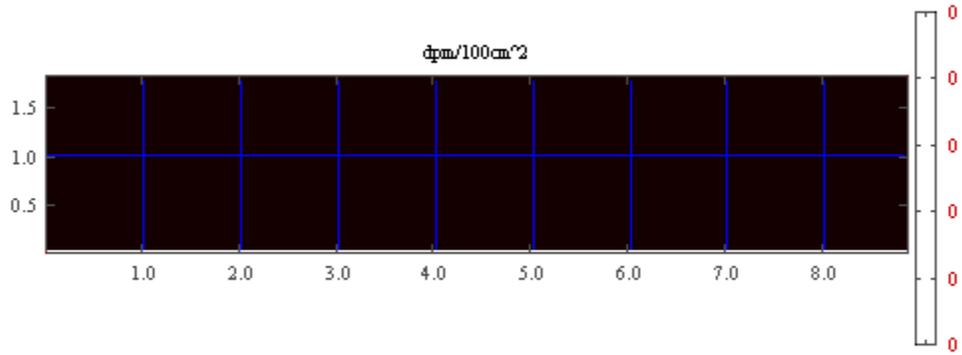


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5101A
Survey Date:	February 11, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

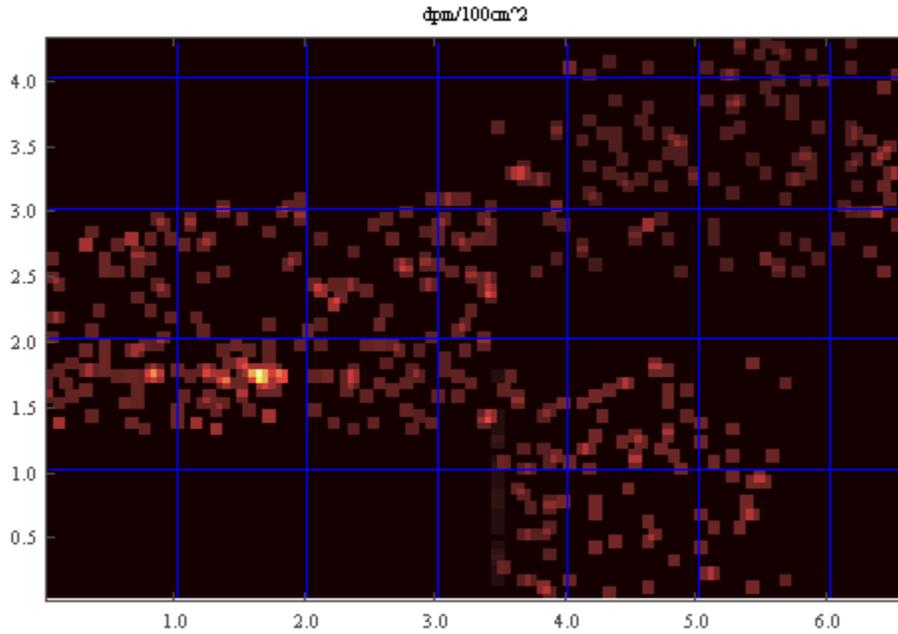


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

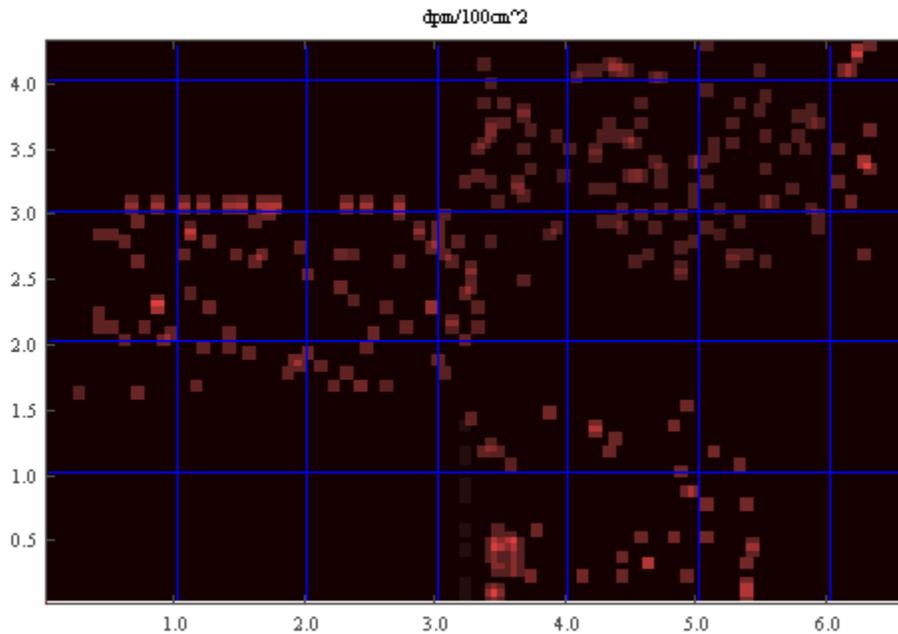


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

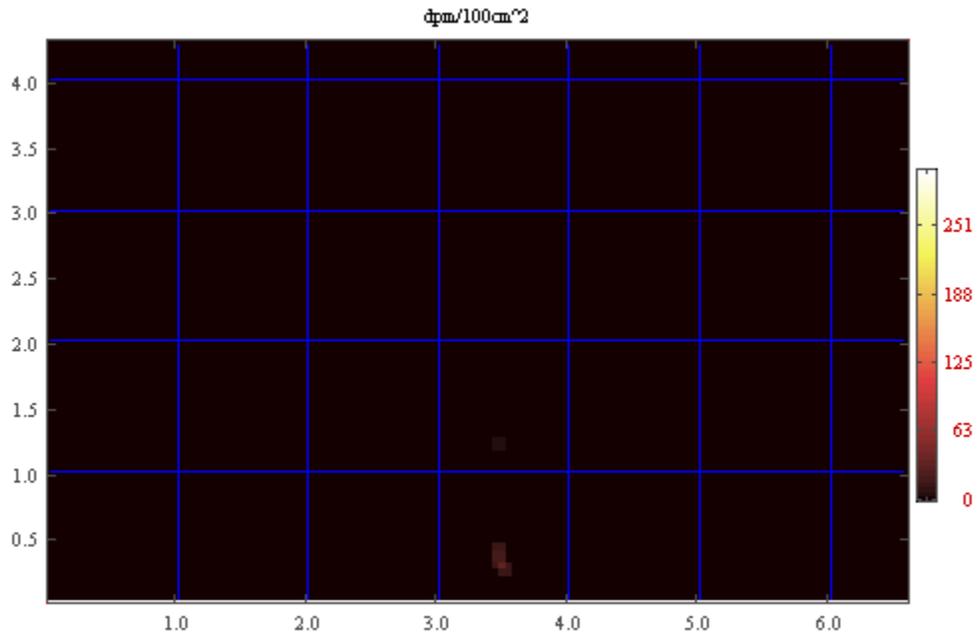


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5101B
Survey Date:	February 16, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

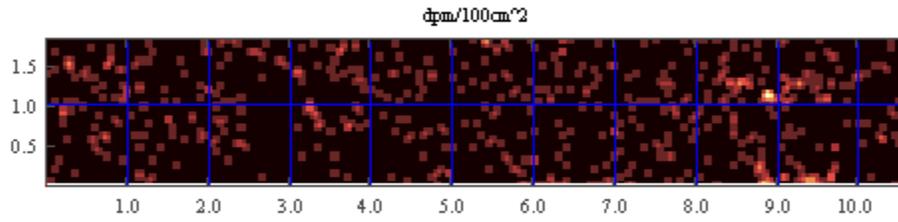


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

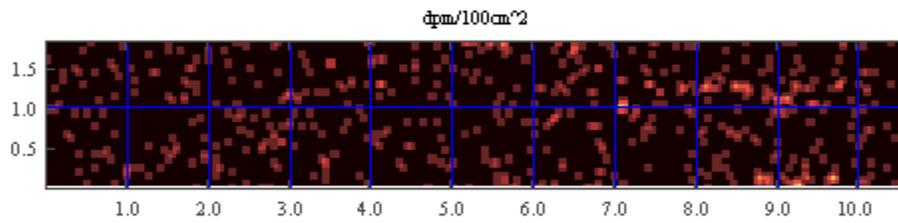


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

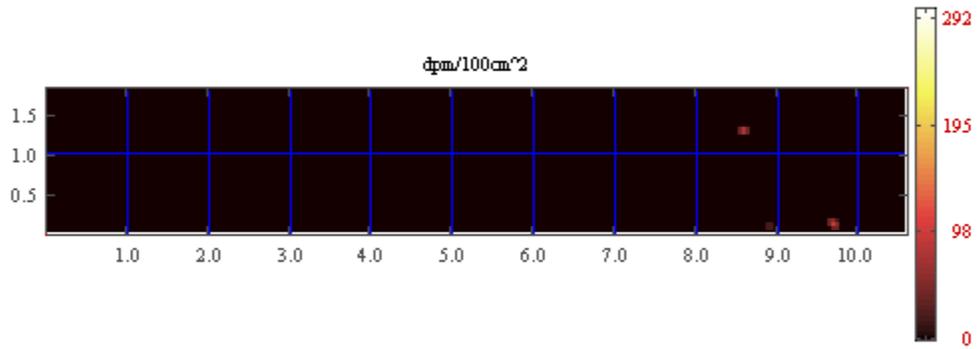


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5111A
Survey Date:	February 16, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	424 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.10 m ²

This survey is not position correlated.

Primary Detector:

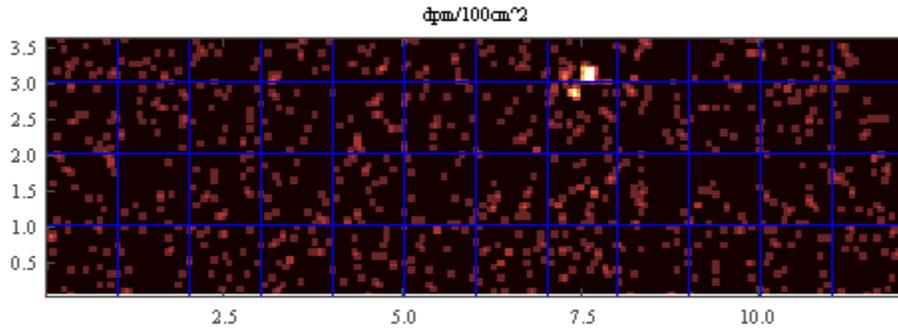


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

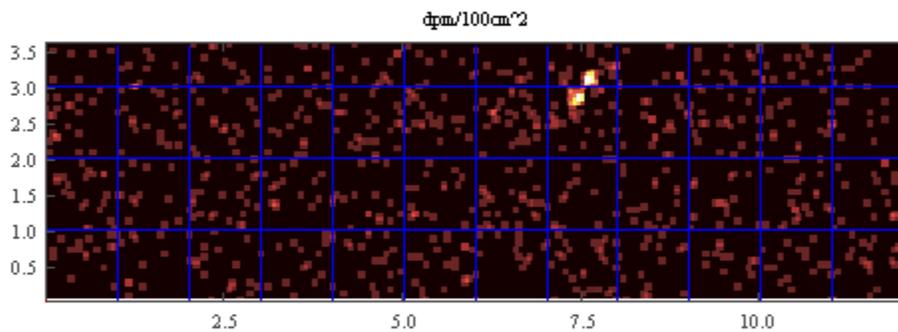


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

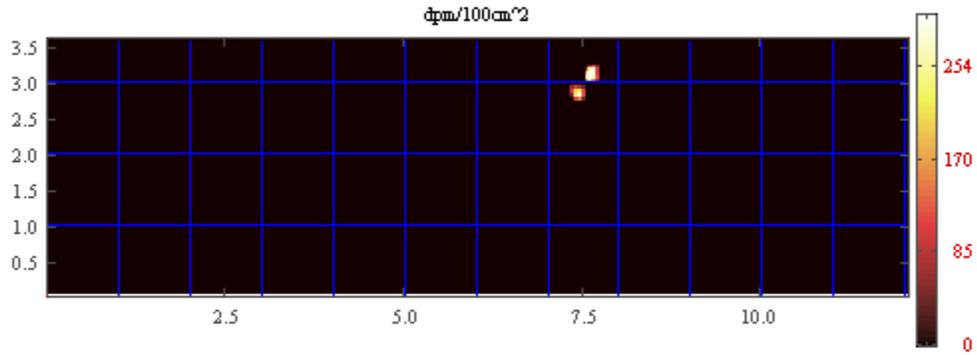


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

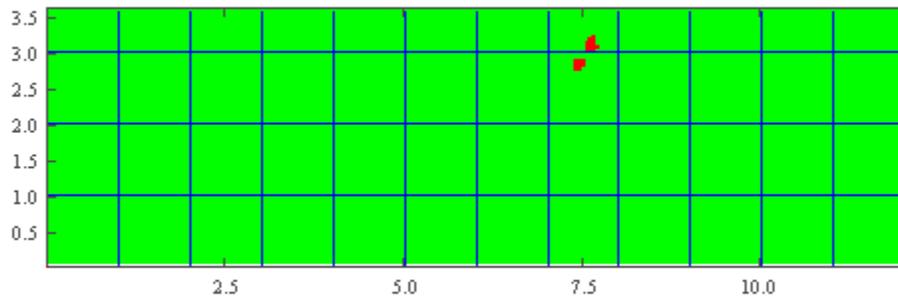


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	424	392	(760,305)	(5,120)	N/A		
Spot	298	390	(745,280)	(0,95)	N/A		
Spot	114	394	(765,320)	(0,135)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5111B
Survey Date:	March 5, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

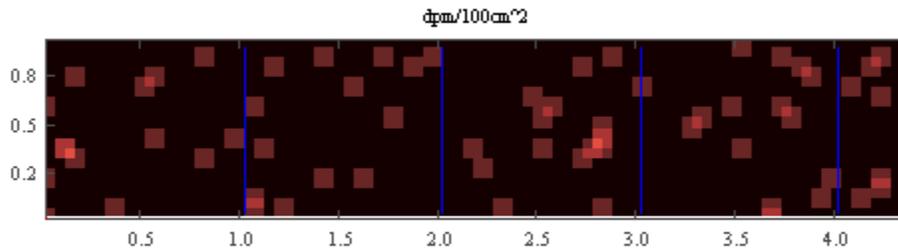


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

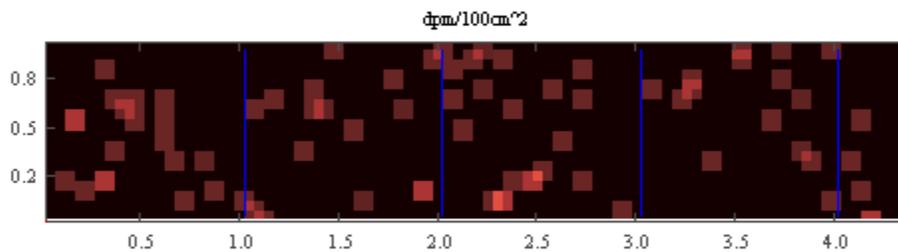


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

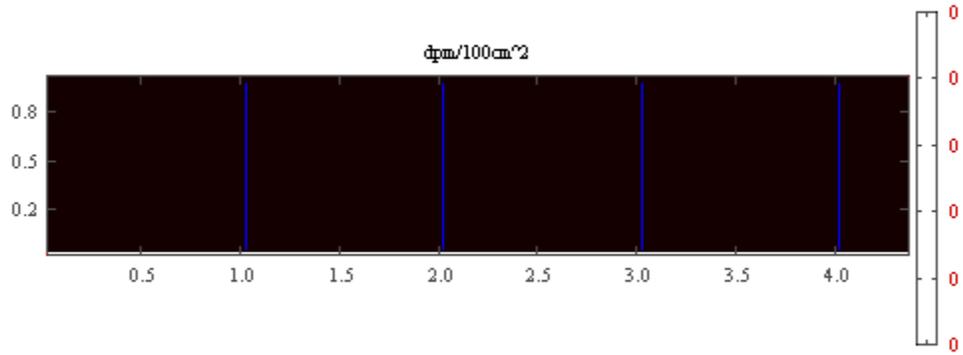


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5121A
Survey Date:	February 17, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

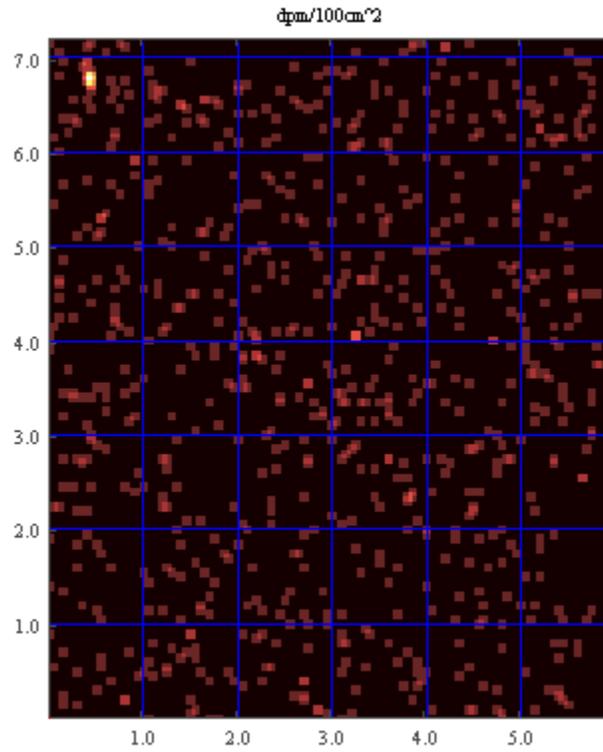


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

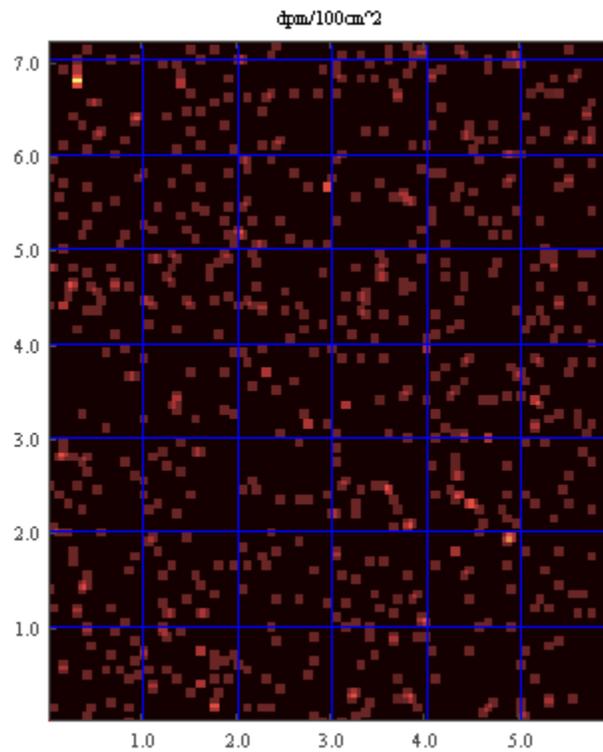


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

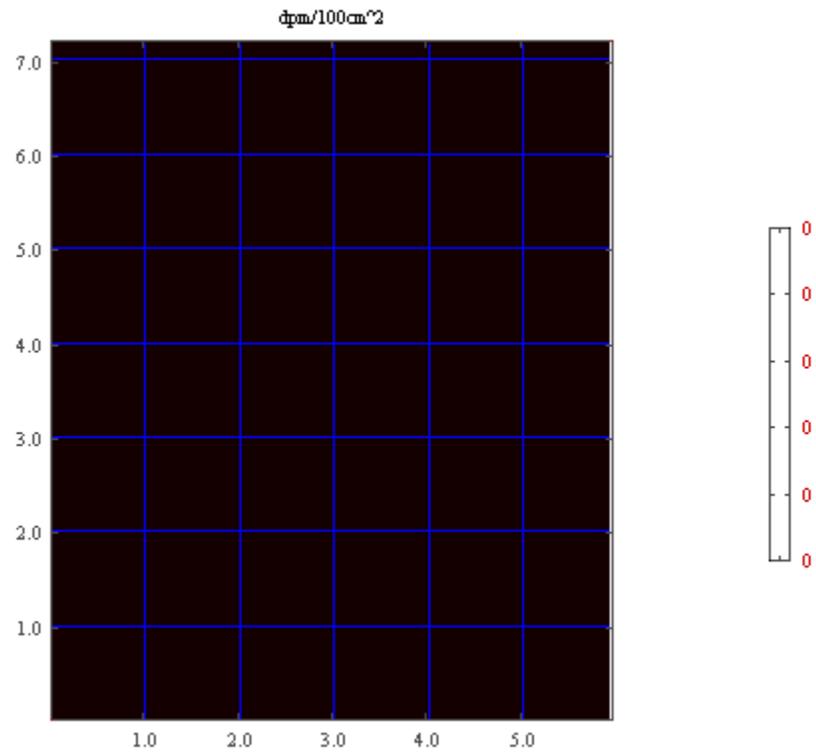


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5201A
Survey Date:	January 17, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	351 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.11 m ²

This survey is not position correlated.

Primary Detector:

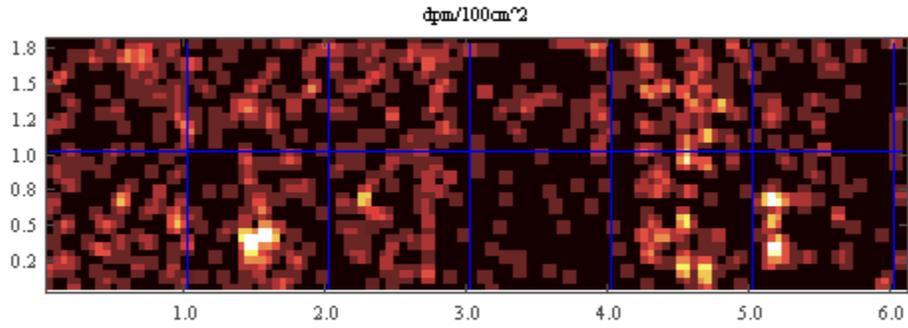


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

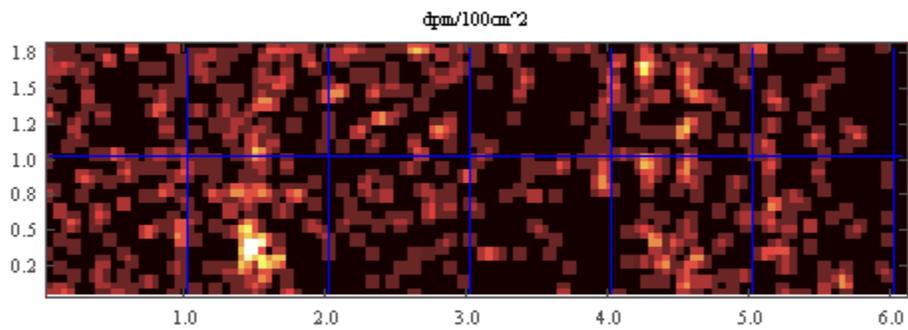


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

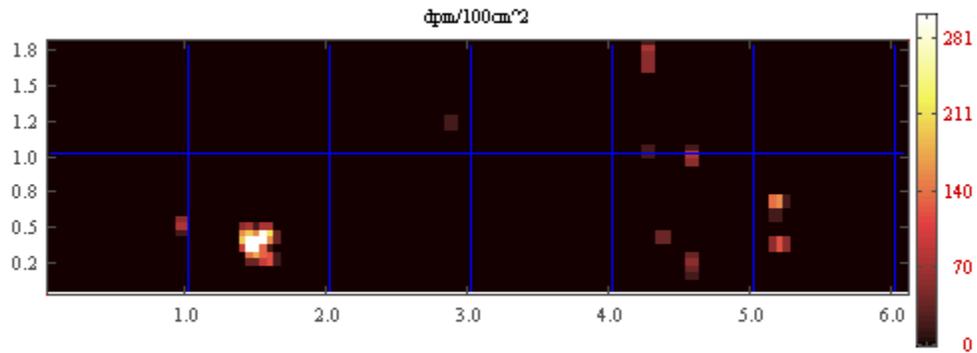


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

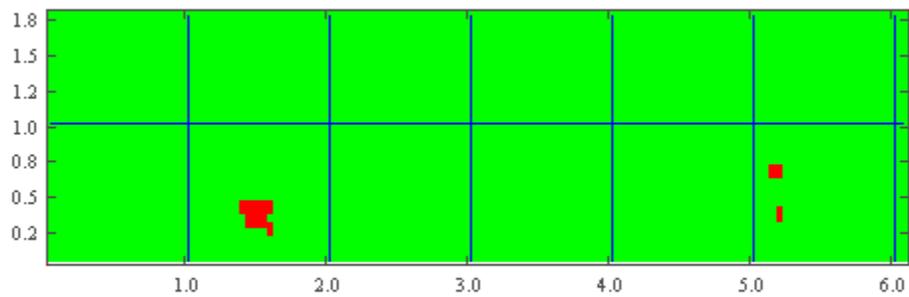


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	351	30	(145,40)	(0,35)	N/A		
Spot	215	32	(160,45)	(5,40)	N/A		
Spot	156	104	(520,65)	(5,60)	N/A		
Spot	117	32	(160,25)	(5,20)	N/A		
Spot	117	104	(520,35)	(5,30)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5201B
Survey Date:	February 15, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

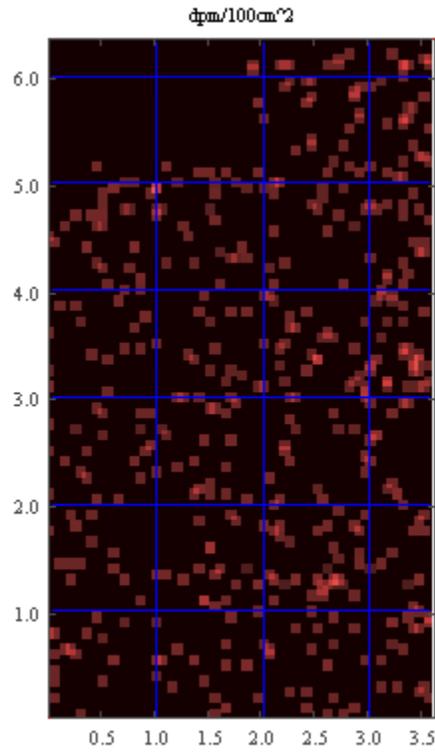


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

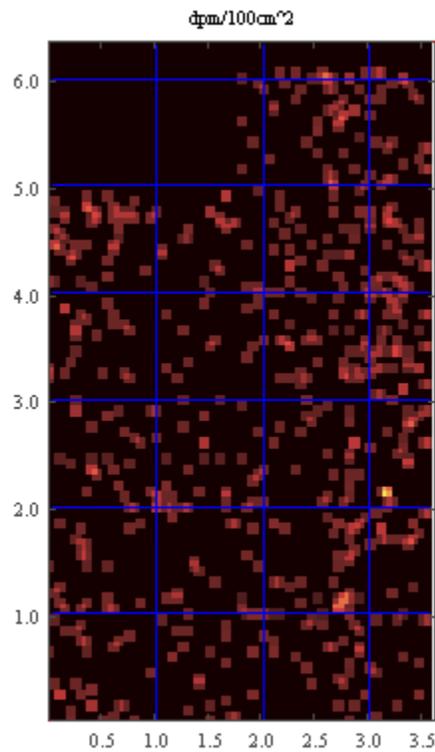


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

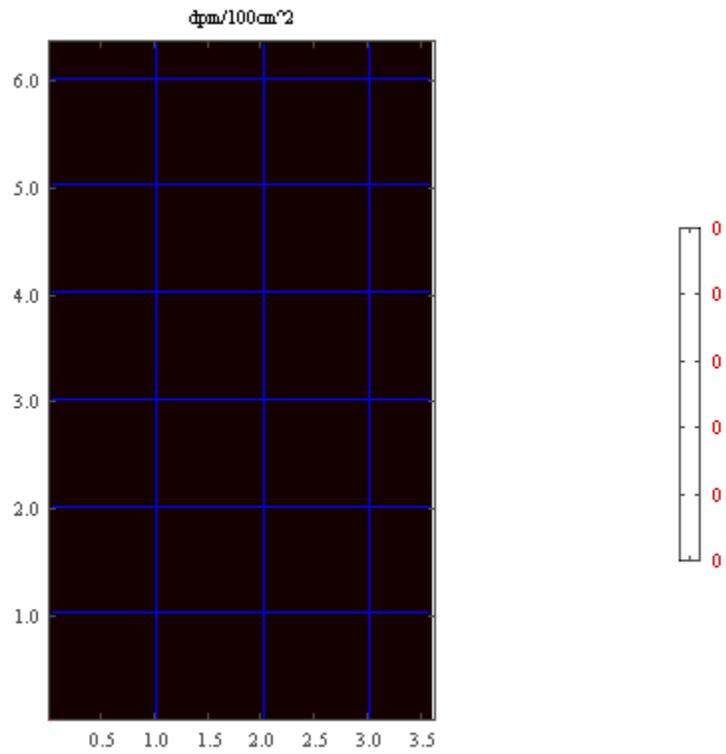


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5211A
Survey Date:	January 17, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	254 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.13 m ²

This survey is not position correlated.

Primary Detector:

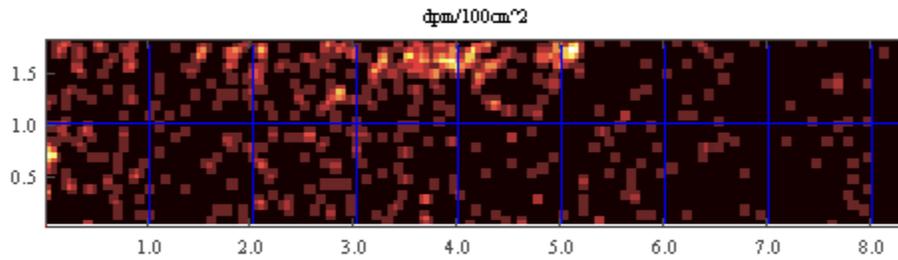


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

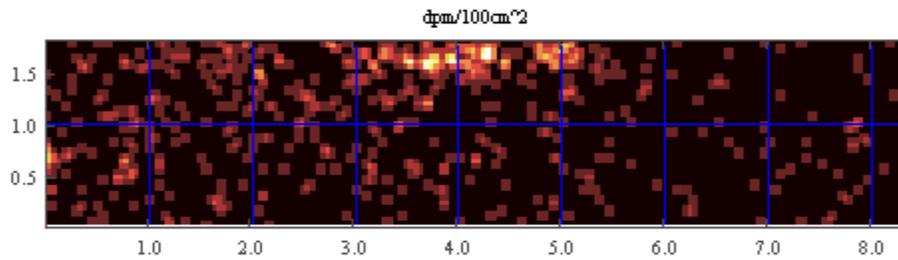


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

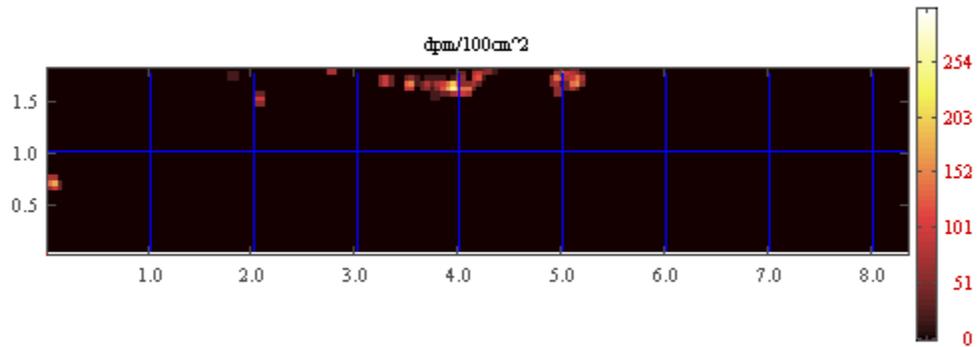


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

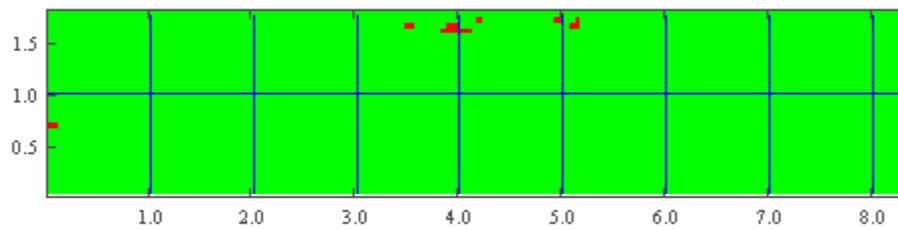


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	254	80	(395,160)	(0,155)	N/A		
Spot	176	2	(10,70)	(5,65)	N/A		
Spot	156	104	(515,165)	(0,160)	N/A		
Spot	150	72	(355,165)	(0,160)	N/A		
Spot	137	100	(495,170)	(0,165)	N/A		
Spot	136	82	(410,160)	(5,155)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5211B
Survey Date:	January 17, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

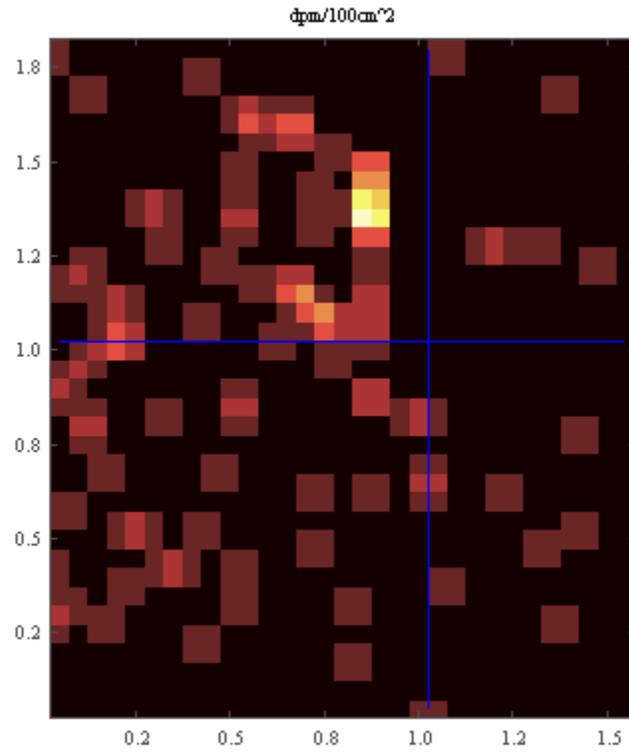


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

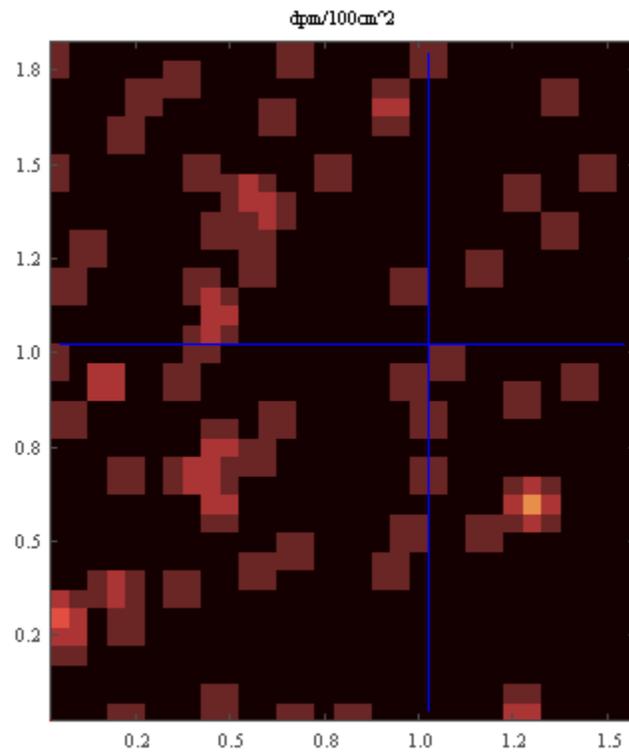


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

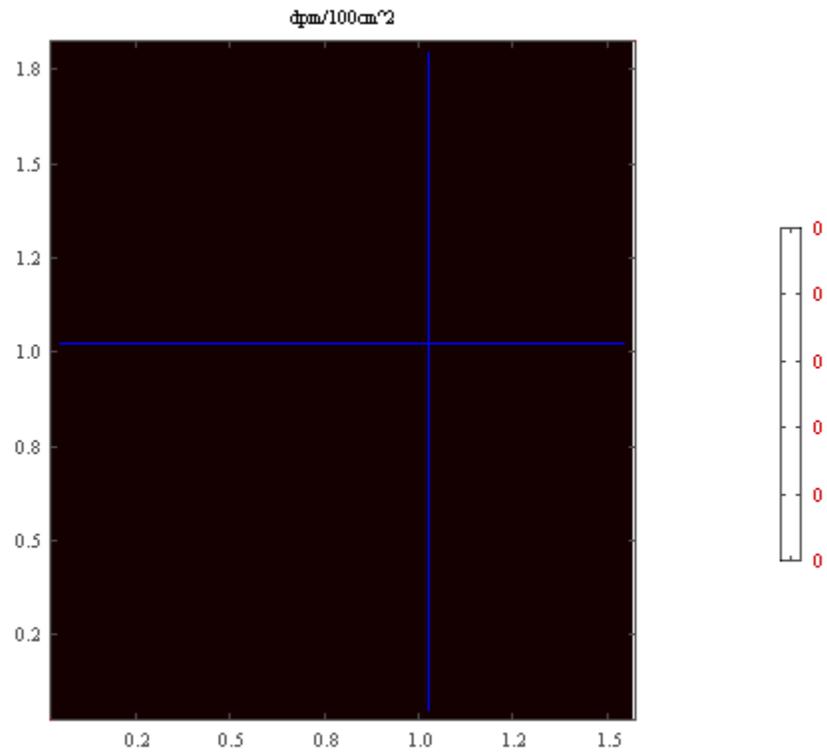


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5211C
Survey Date:	March 4, 2011
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

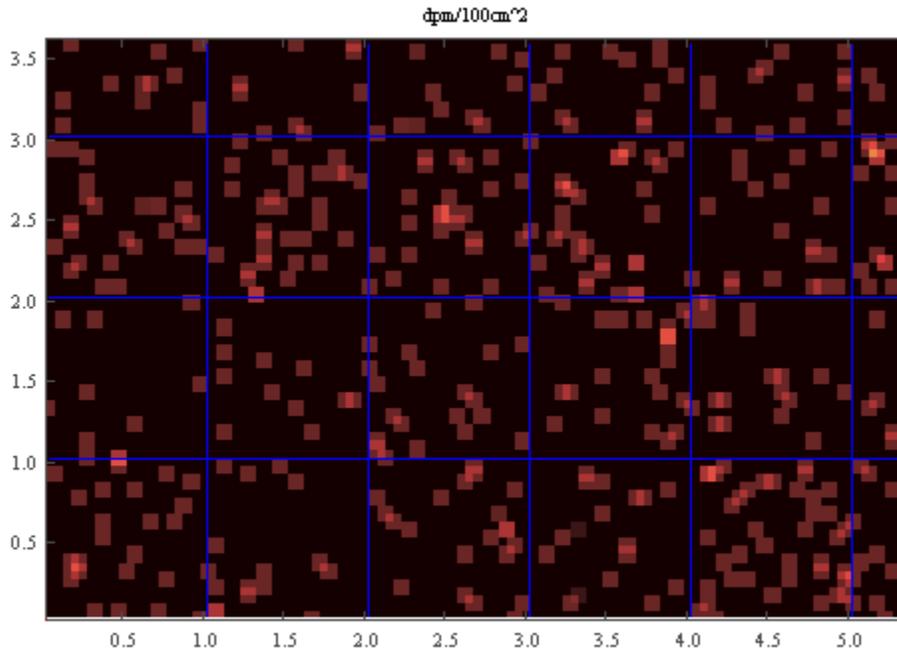


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

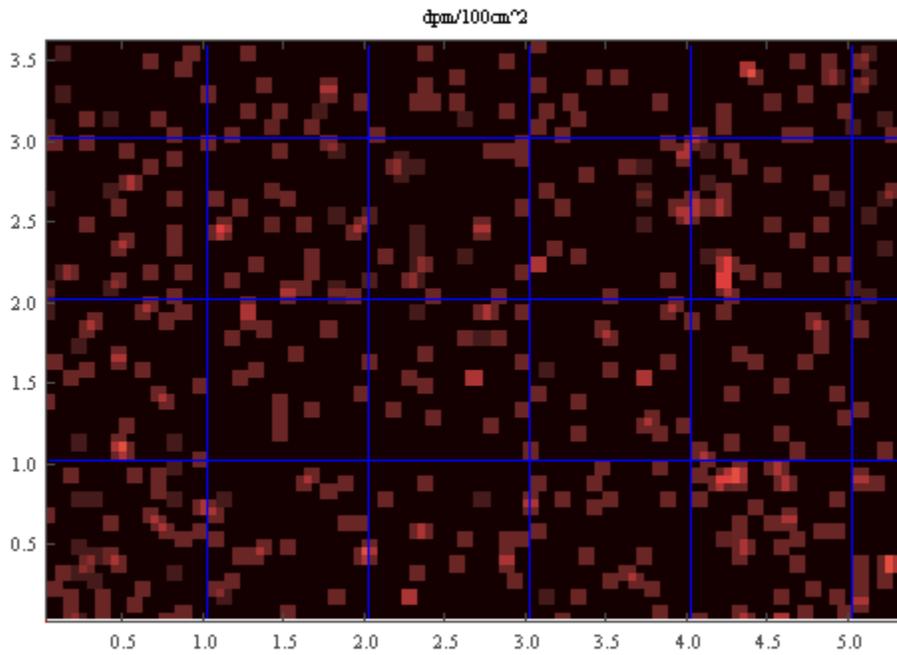


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

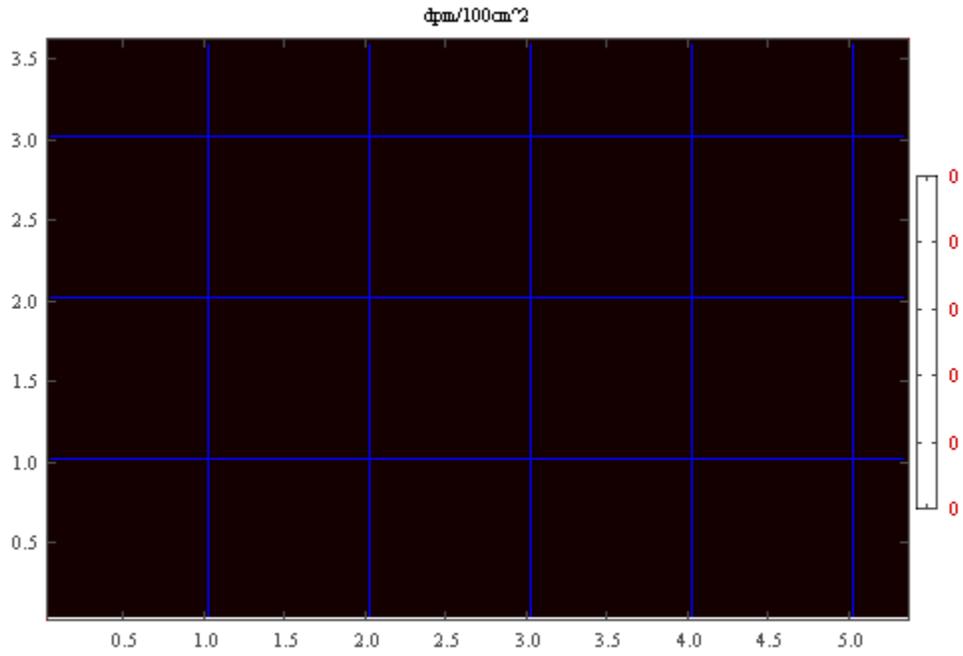


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5221A
Survey Date:	January 13, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

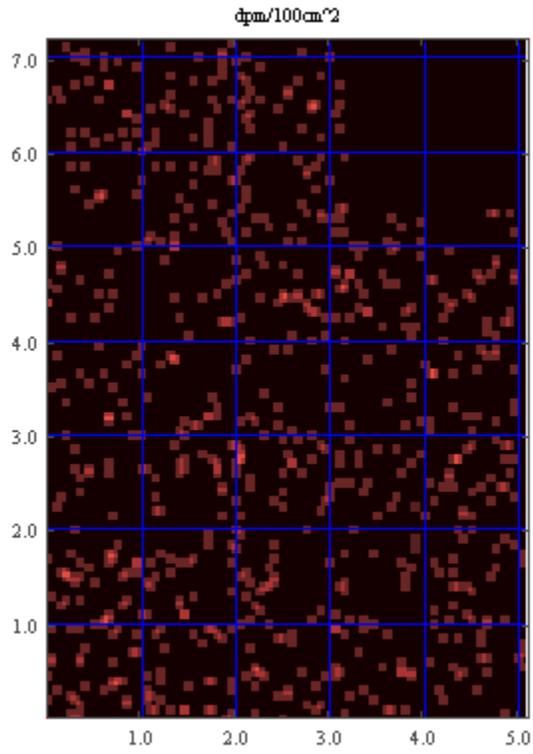


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

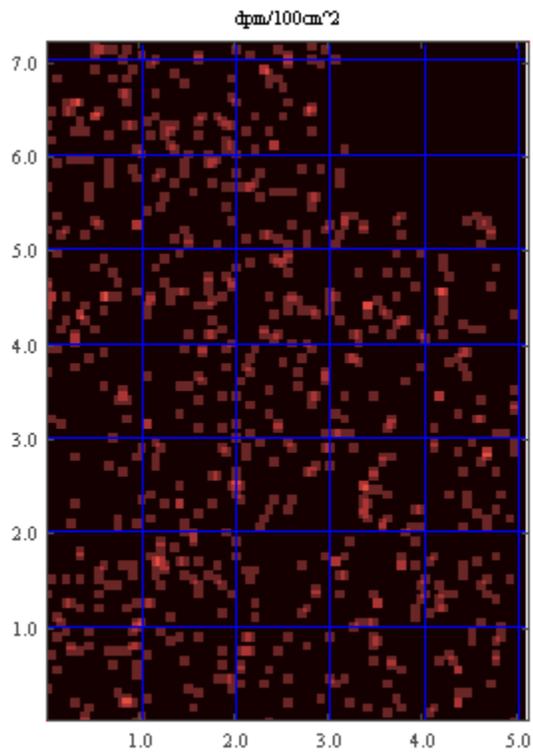


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

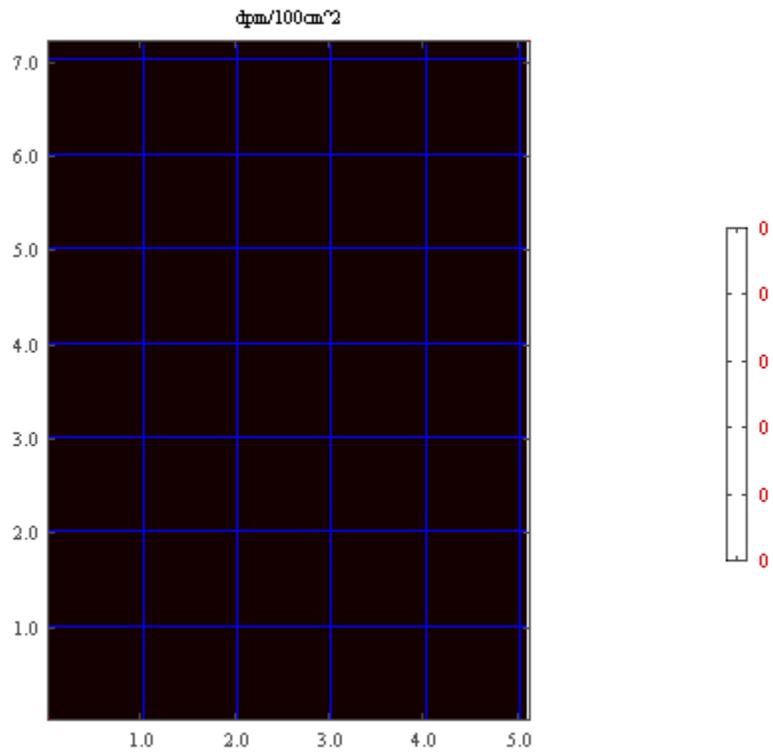


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5221B
Survey Date:	February 22, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

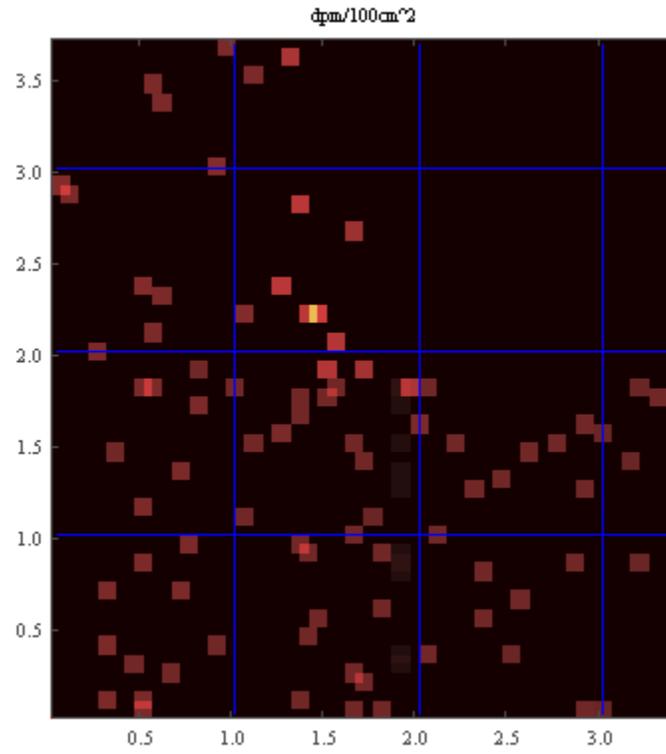


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

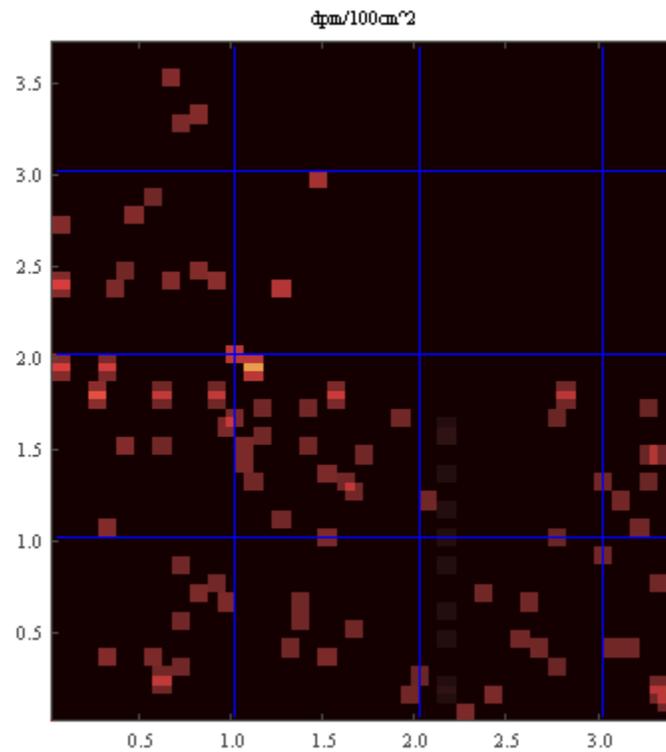


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

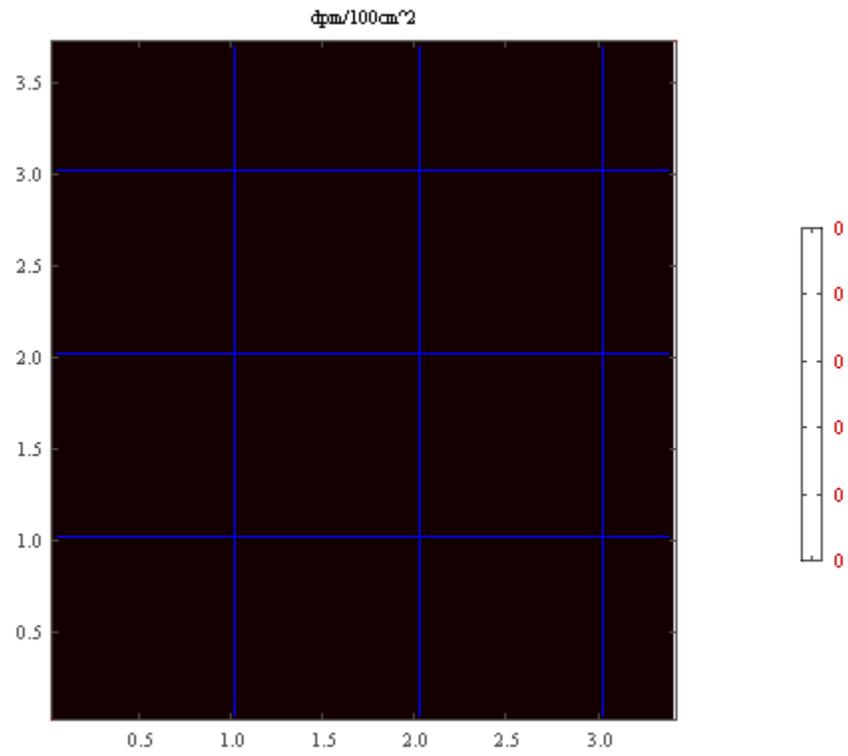


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5301A
Survey Date:	January 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	344 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.07 m ²

This survey is not position correlated.

Primary Detector:

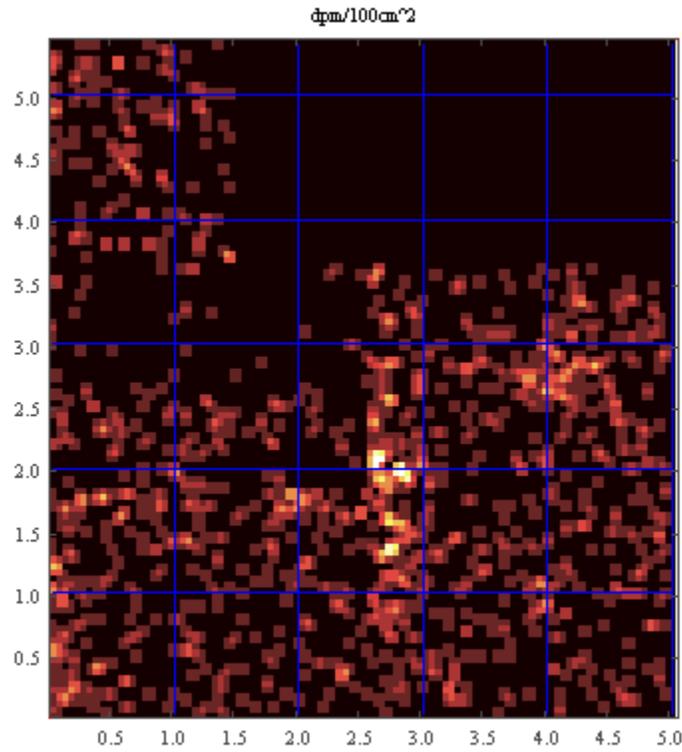


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

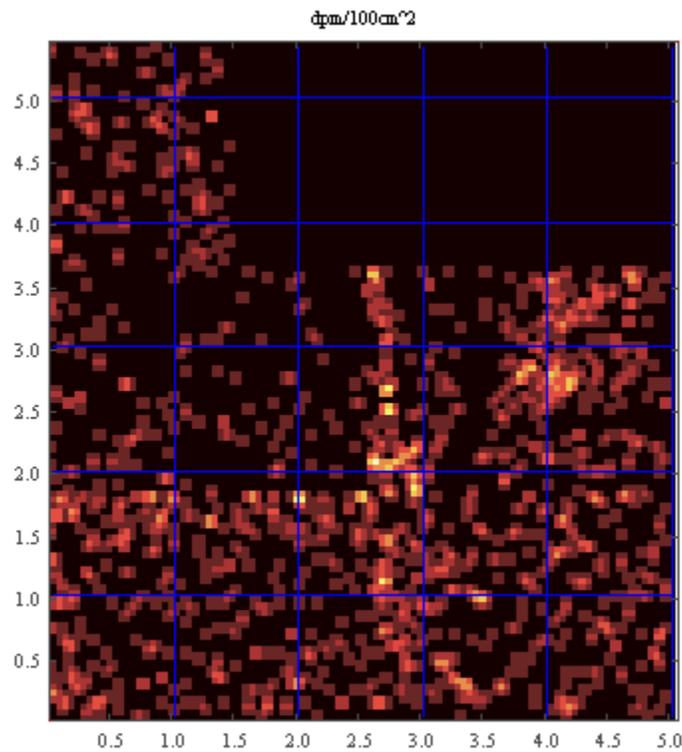


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

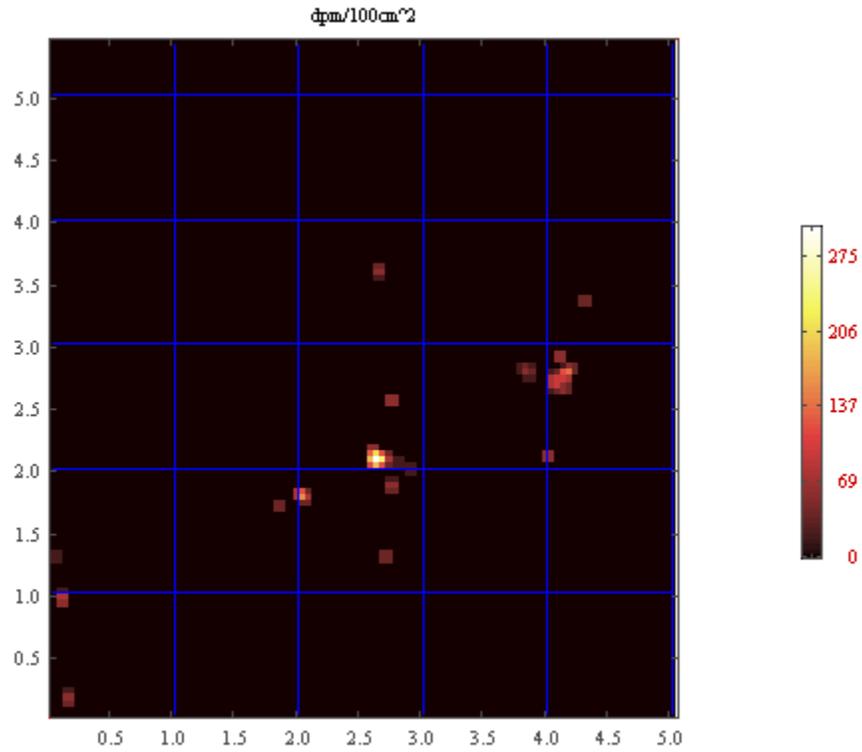


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

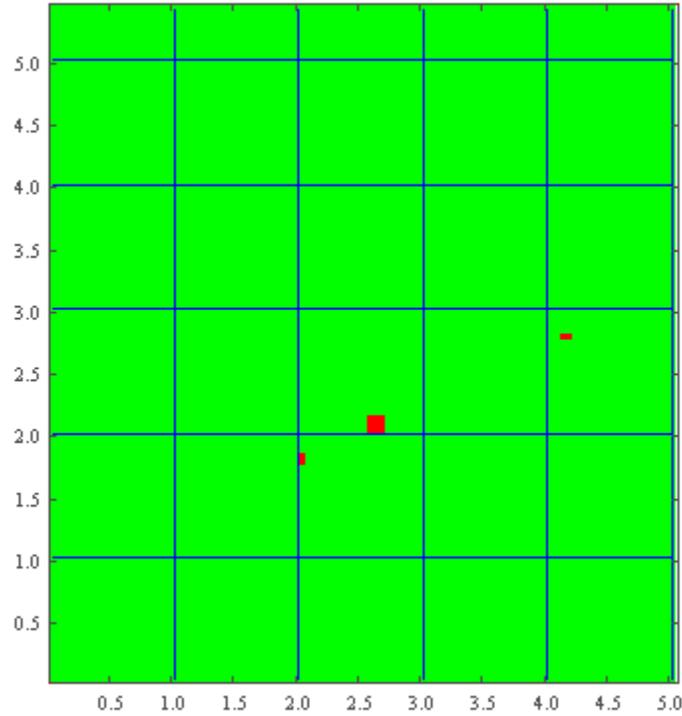


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	344	154	(265,210)	(0,20)	N/A		
Spot	156	42	(205,180)	(0,170)	N/A		
Spot	137	184	(420,280)	(5,90)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5311A
Survey Date:	January 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

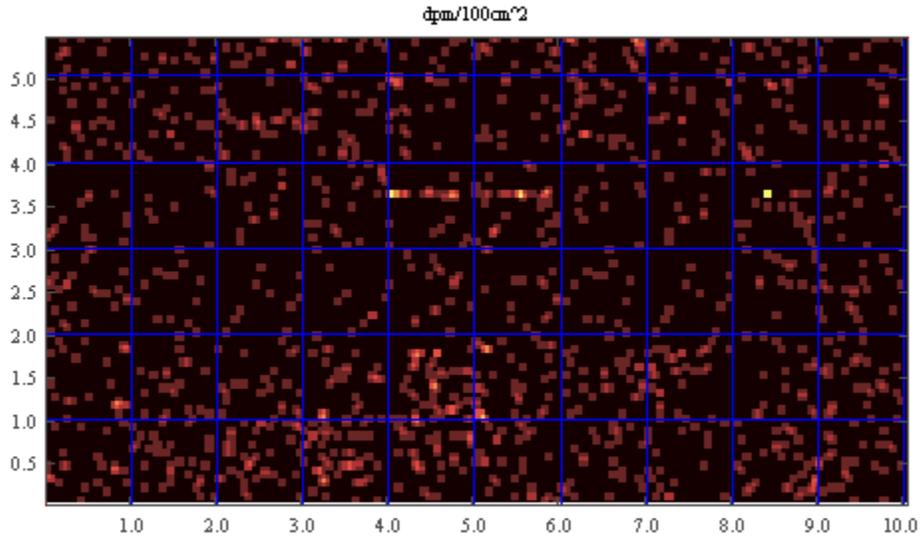


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

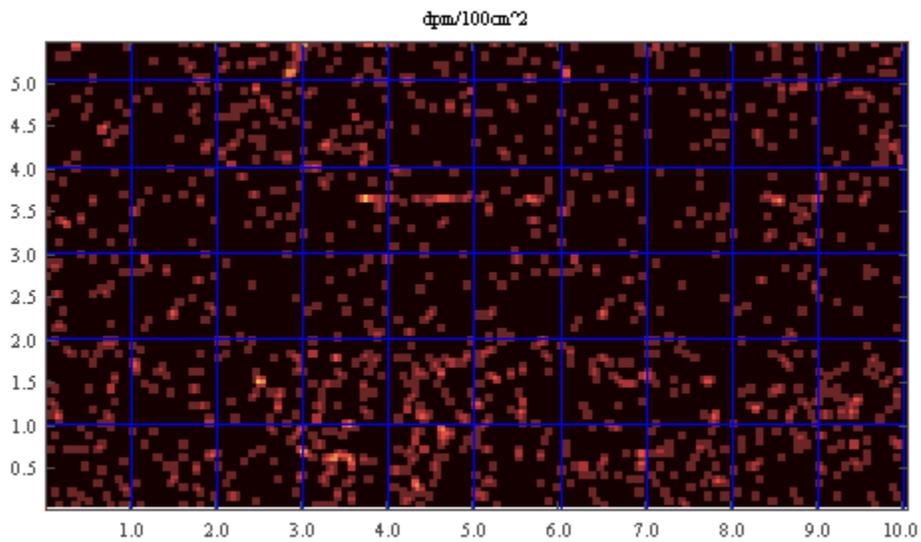


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

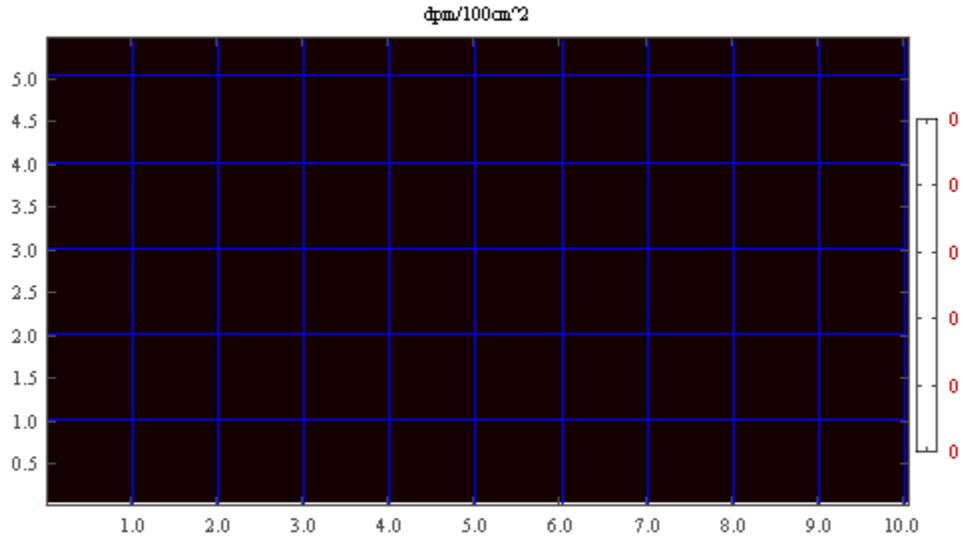


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5321A
Survey Date:	January 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

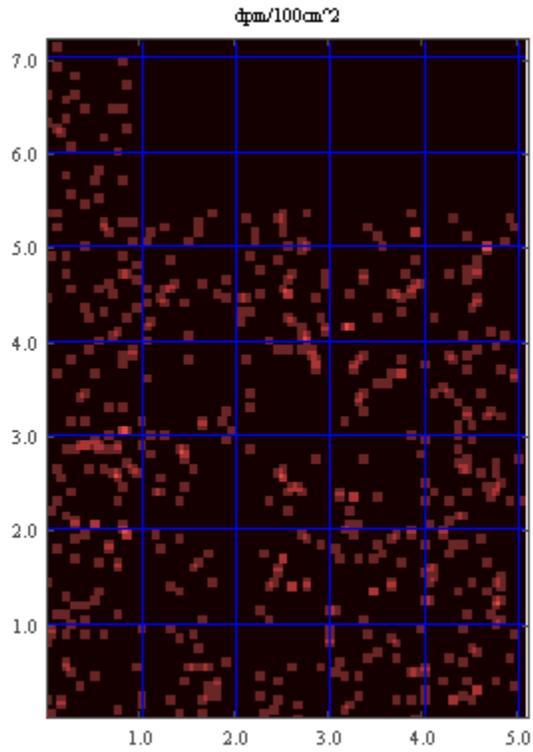


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

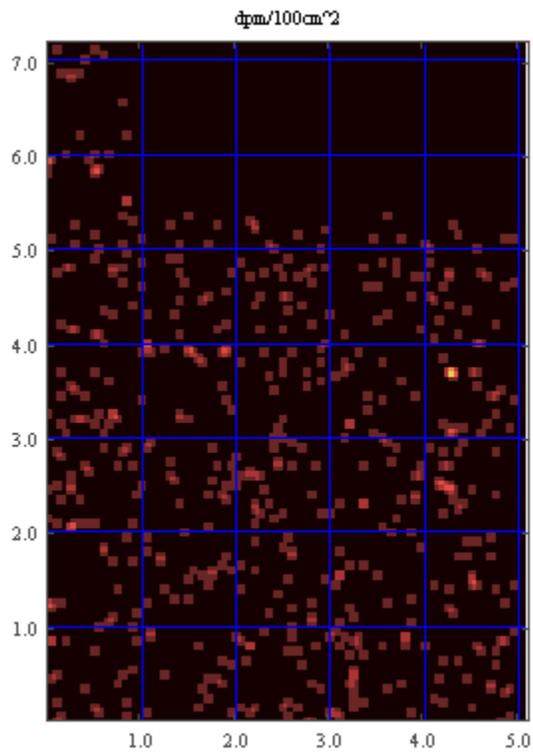


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

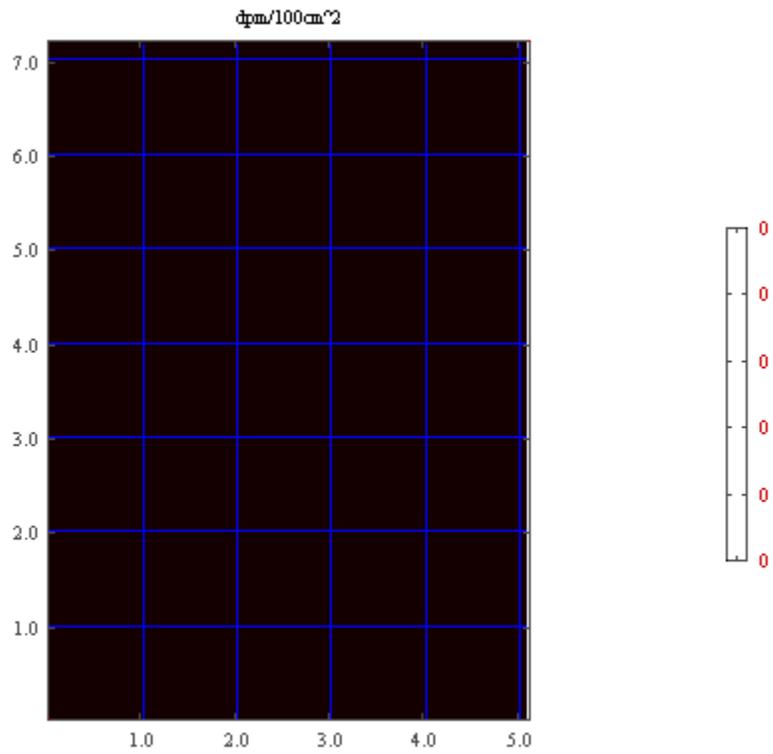


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5401A
Survey Date:	December 10, 2010
Survey Equipment:	SCM9
Detector(s):	R180 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	254 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.05 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

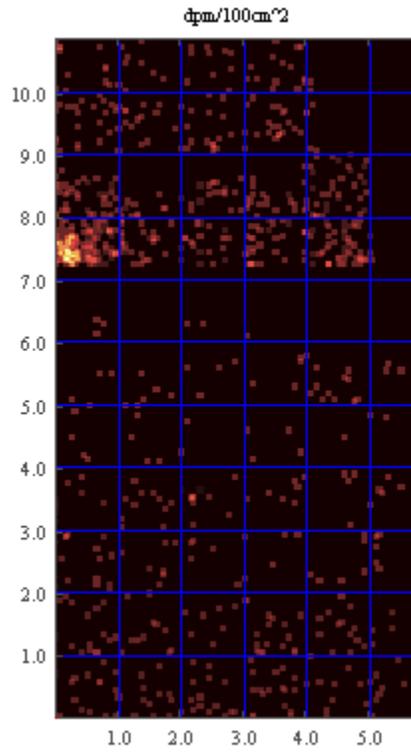


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

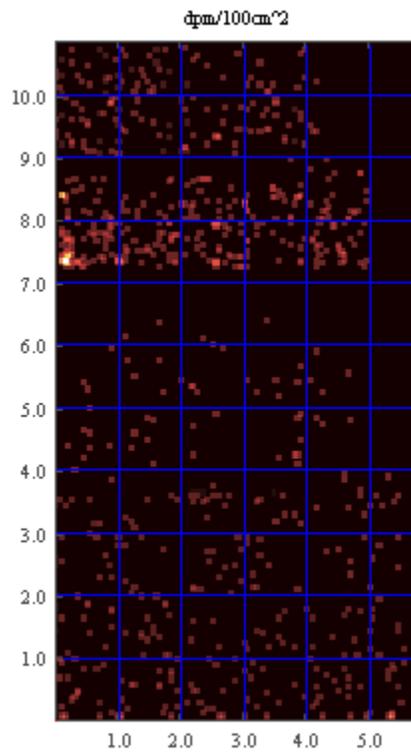


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

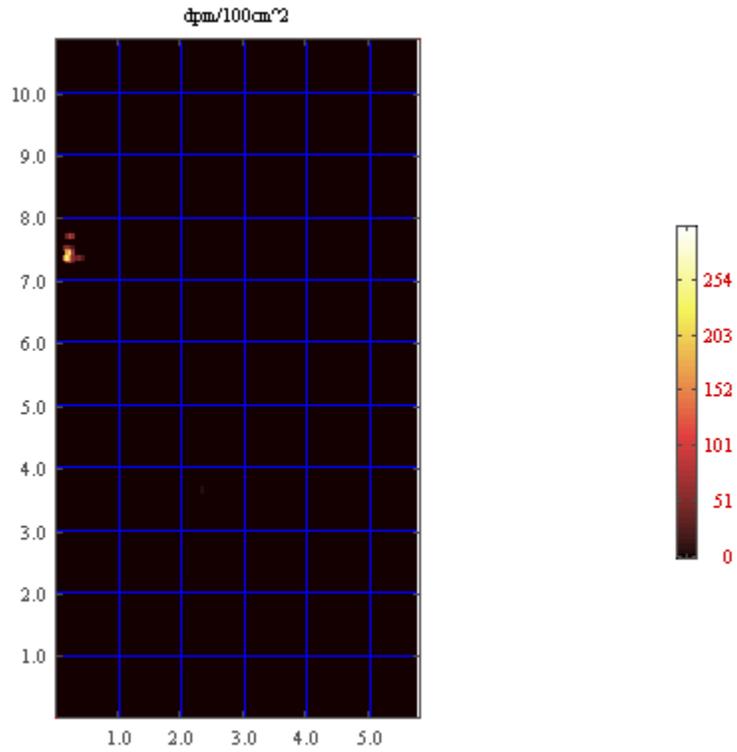


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

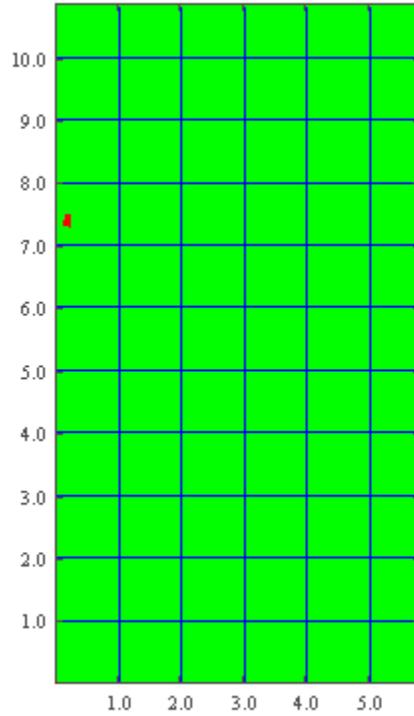


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	254	5	(25,745)	(0,15)	N/A		
Spot	117	5	(25,730)	(0,0)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5411A
Survey Date:	December 8, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

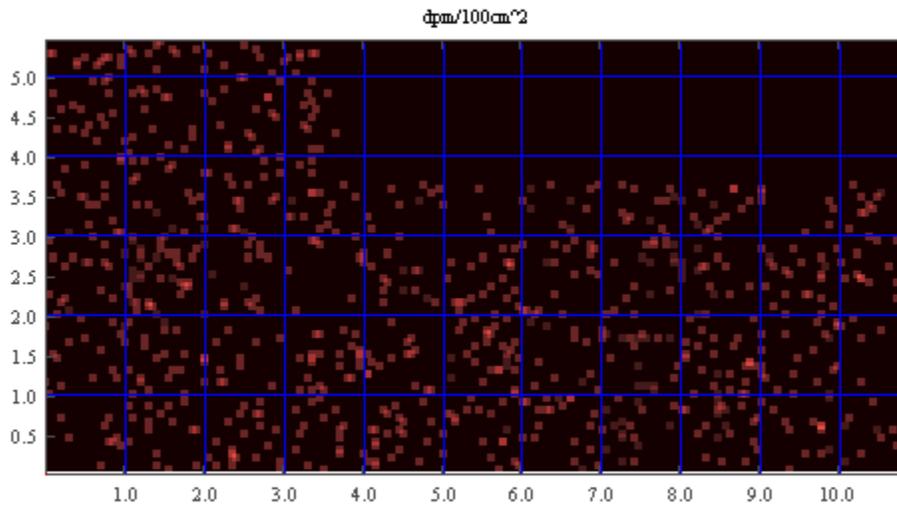


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

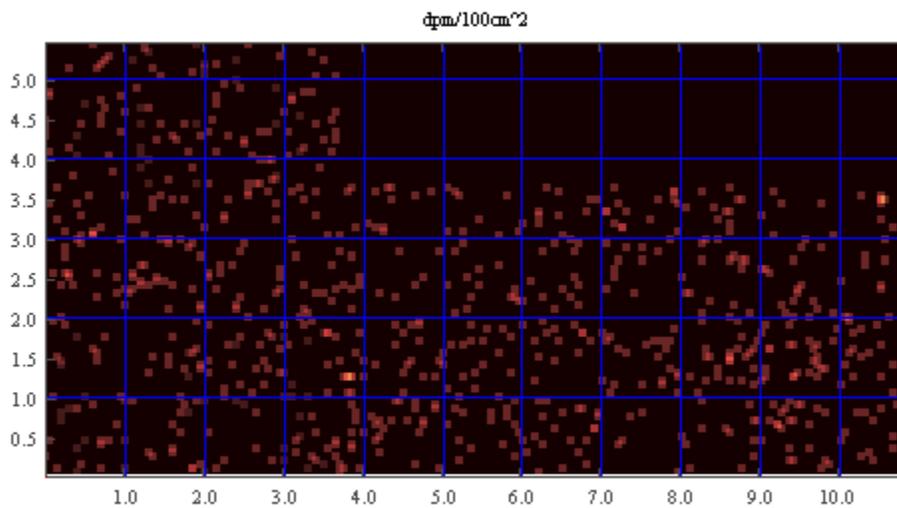


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

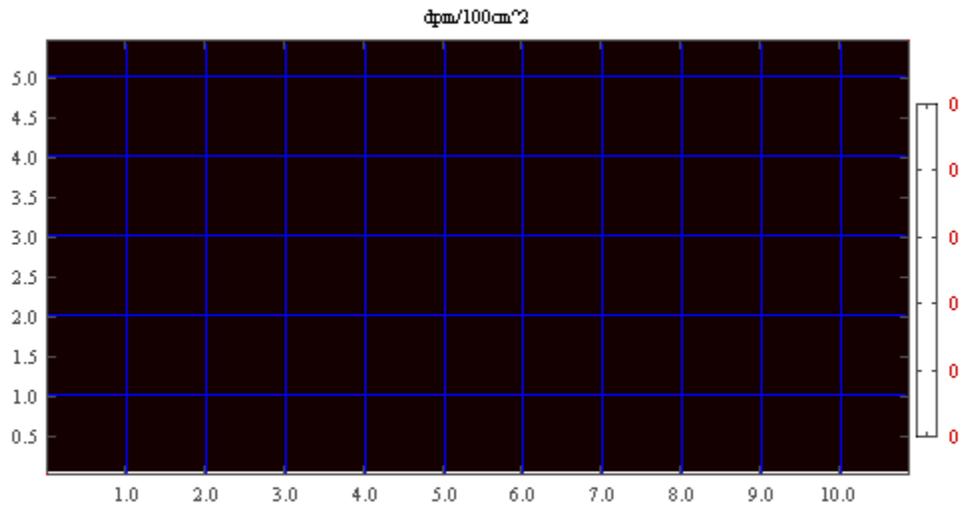


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5421A
Survey Date:	December 10, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

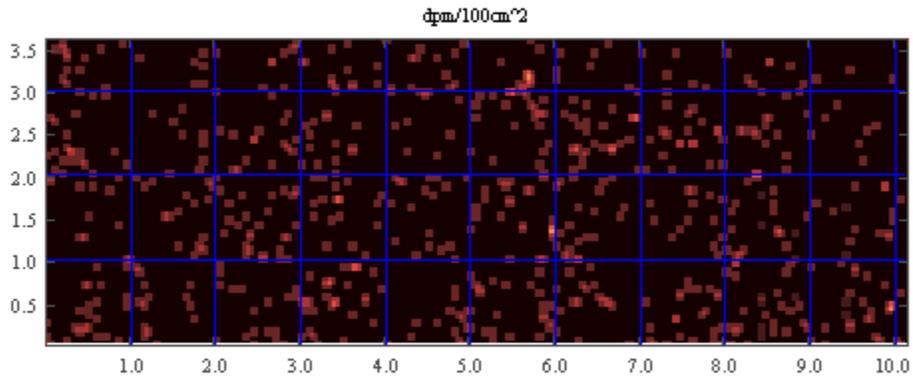


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

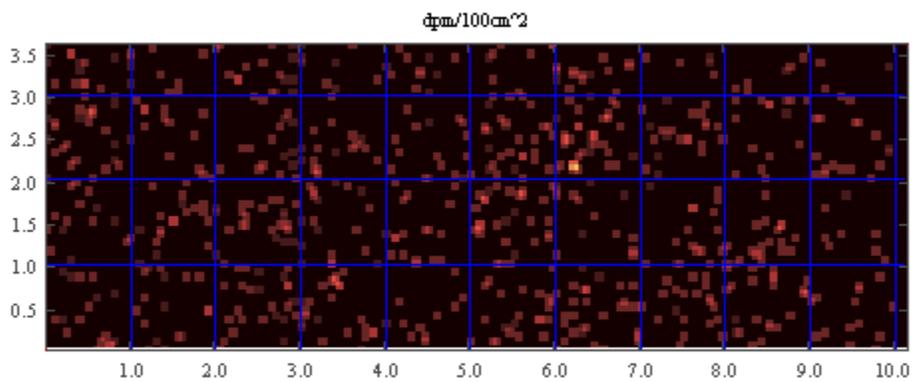


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

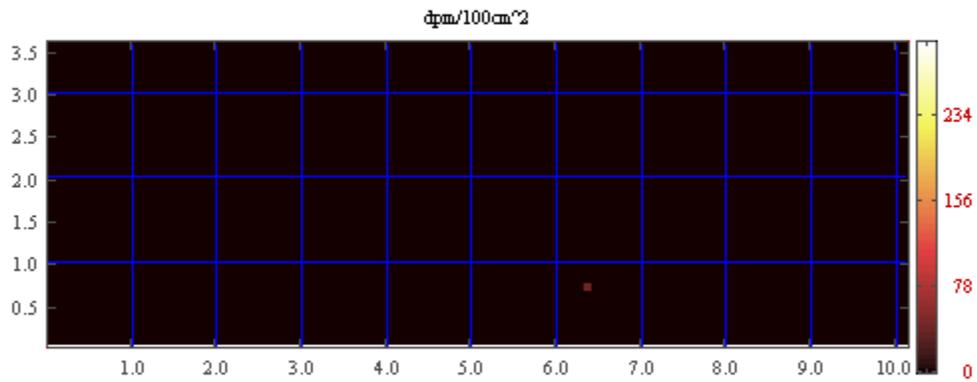


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5431A
Survey Date:	December 10, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

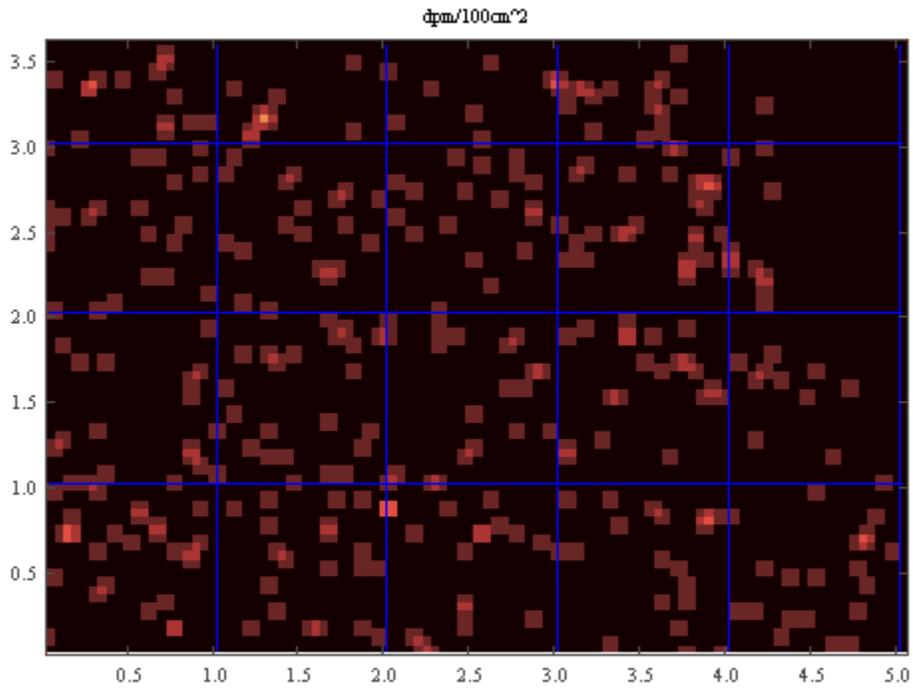


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

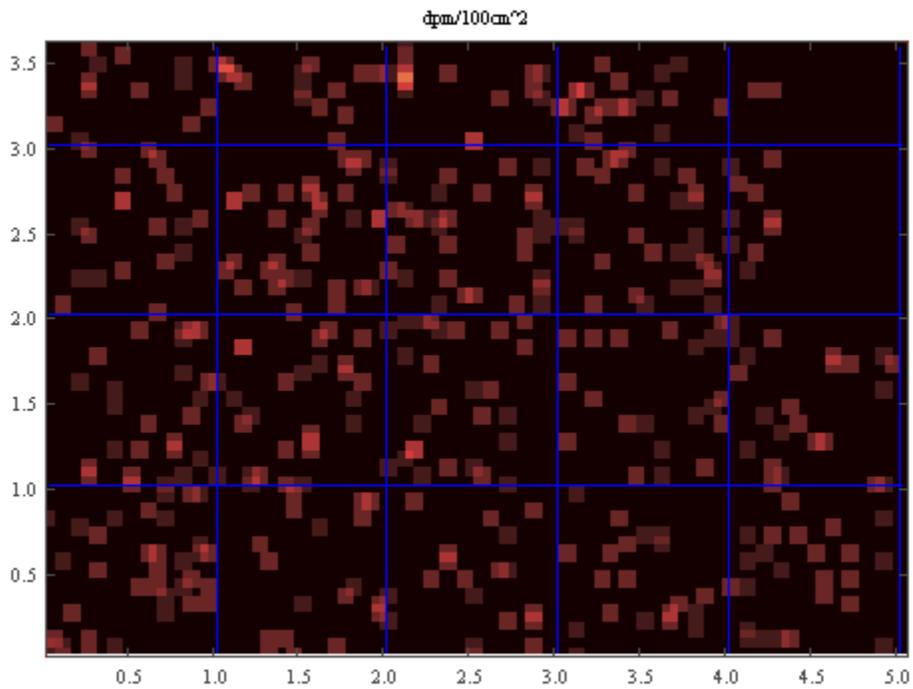


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

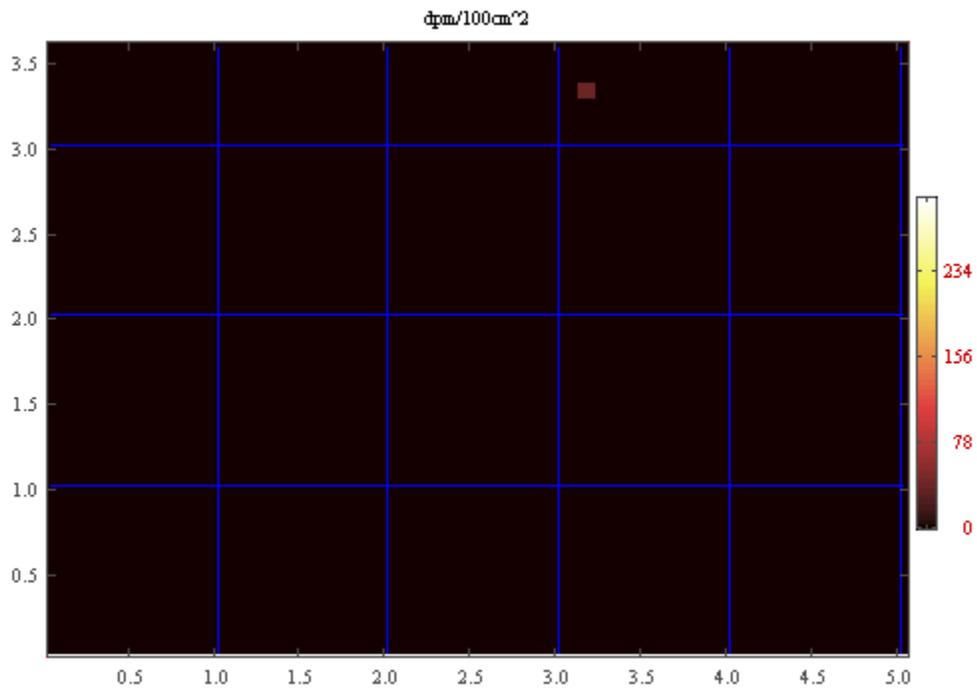


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5501A
Survey Date:	December 8, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

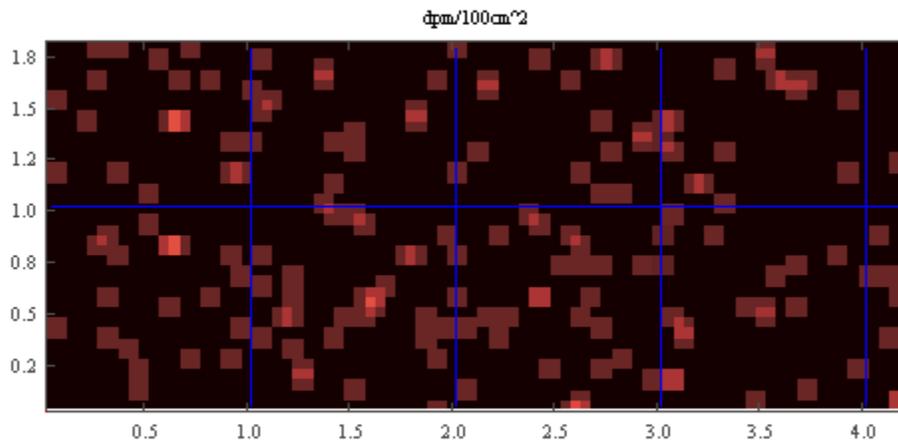


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

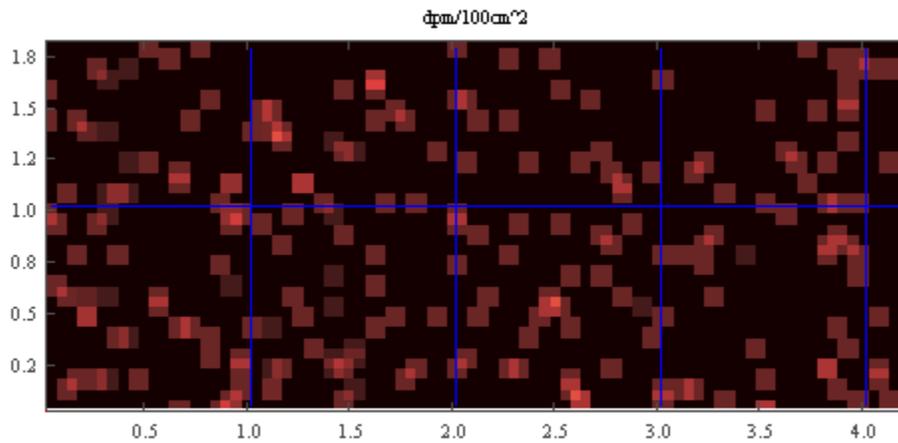


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

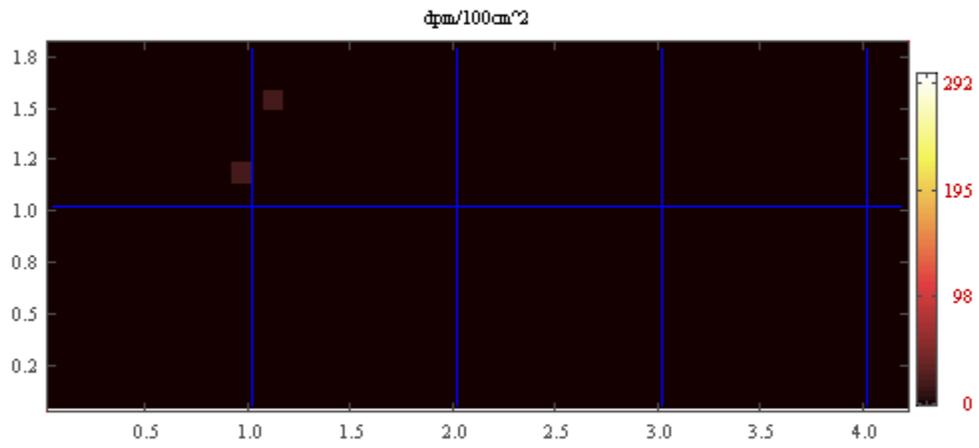


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5511A
Survey Date:	December 8, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

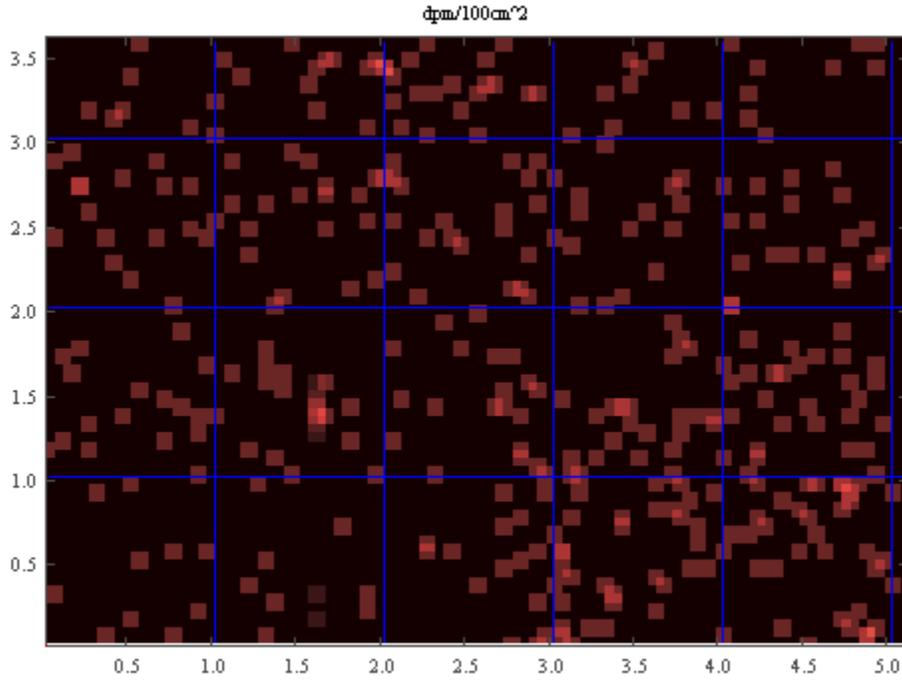


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

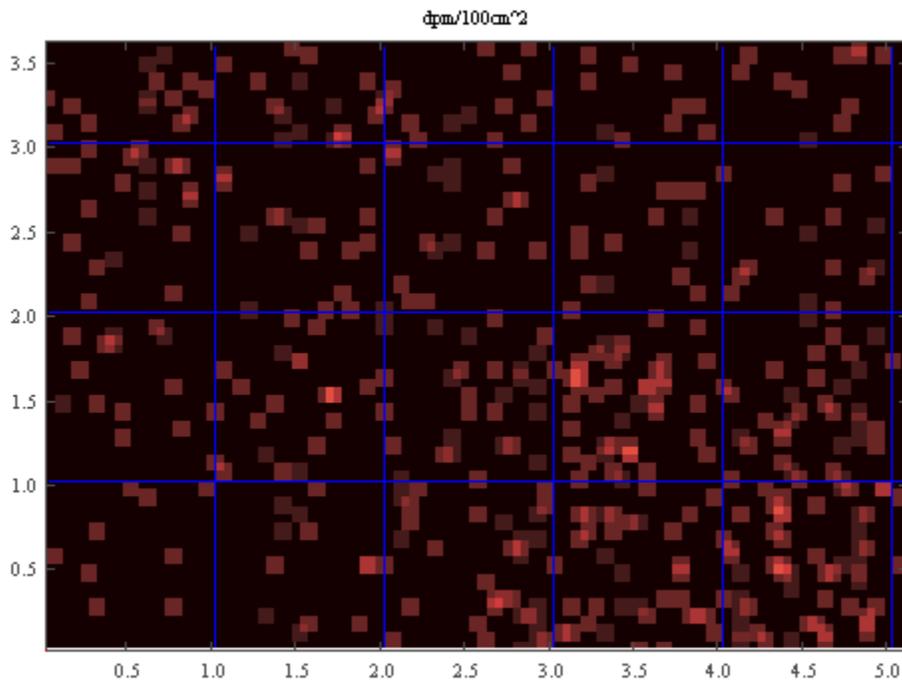


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

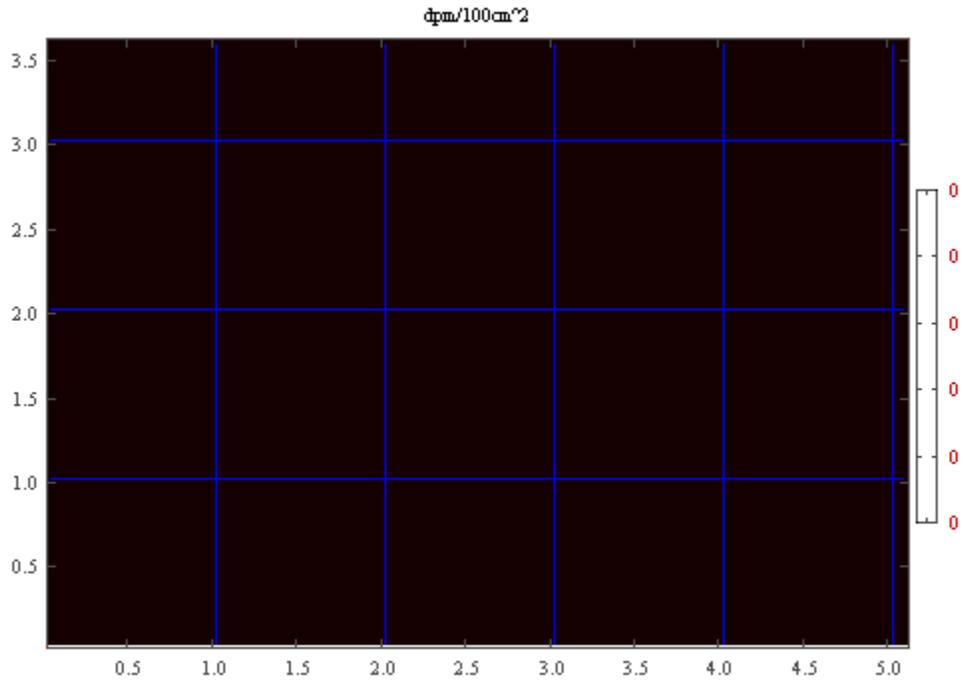


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5521A
Survey Date:	December 10, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

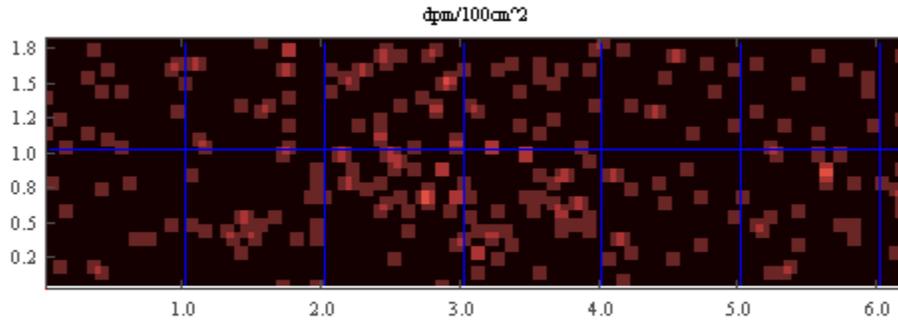


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

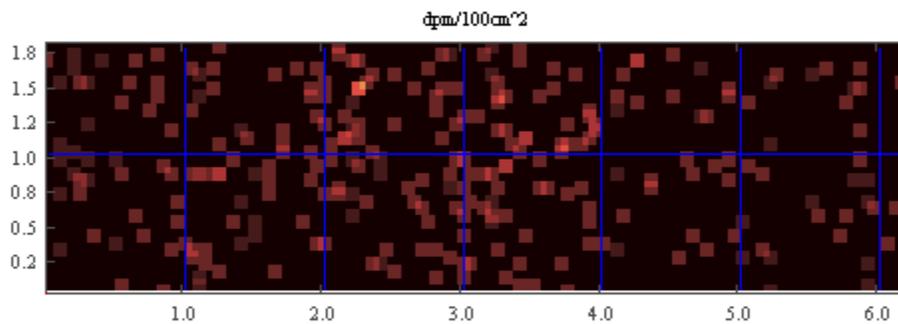


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA5601A
Survey Date:	December 14, 2010
Survey Equipment:	SCM9
Detector(s):	C90 C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	188 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.26 m ²

This survey is not position correlated.

Primary Detector:

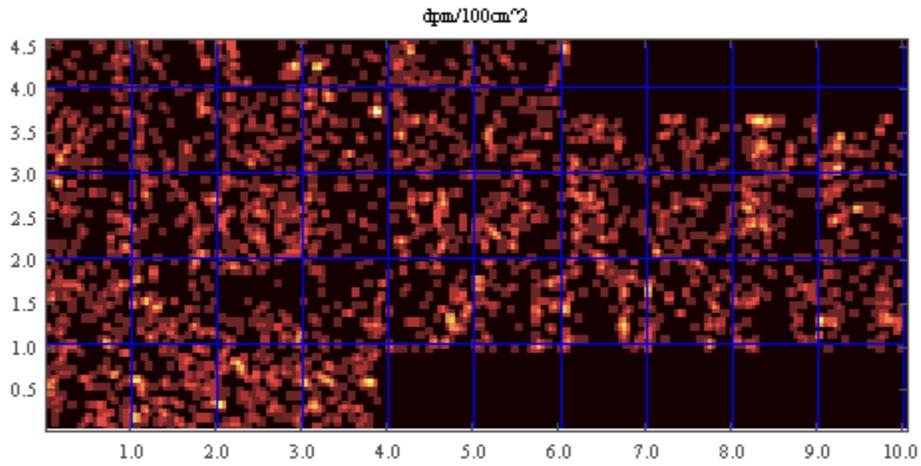


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

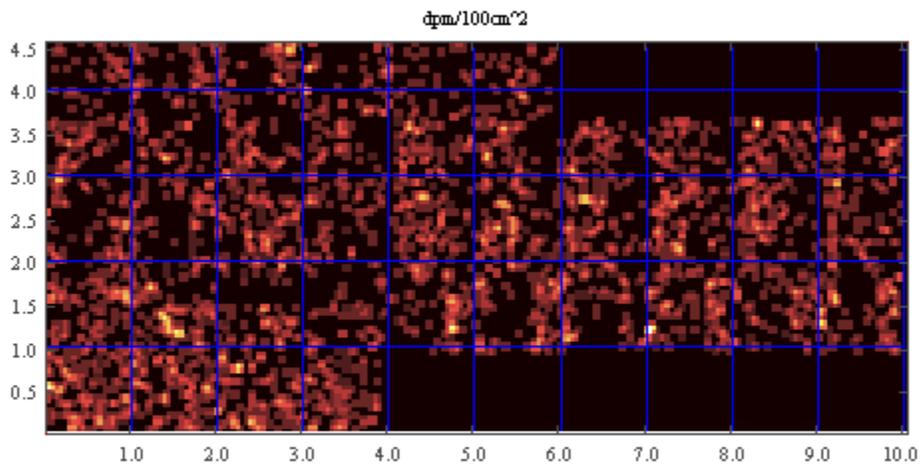


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

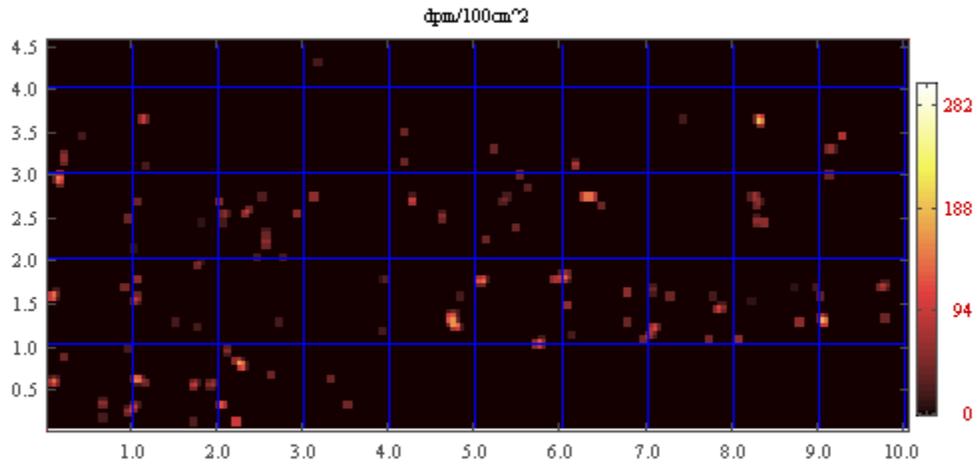


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

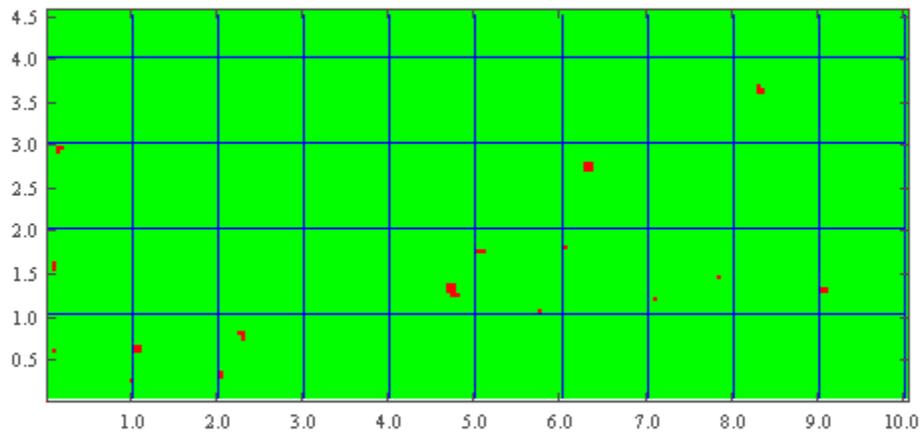


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	188	566	(830,360)	(5,80)	N/A		
Spot	179	182	(905,130)	(0,30)	N/A		
Spot	176	46	(225,80)	(0,70)	N/A		
Spot	163	96	(475,130)	(0,30)	N/A		
Spot	148	404	(15,295)	(0,15)	N/A		
Spot	148	22	(105,60)	(0,50)	N/A		
Spot	137	102	(510,175)	(5,75)	N/A		
Spot	137	326	(630,270)	(5,80)	N/A		
Spot	136	2	(10,60)	(5,50)	N/A		
Spot	136	2	(10,160)	(5,150)	N/A		
Spot	132	122	(605,180)	(0,80)	N/A		
Spot	117	42	(205,30)	(0,20)	N/A		
Spot	117	116	(575,105)	(0,5)	N/A		
Spot	109	158	(785,145)	(0,45)	N/A		
Spot	109	142	(710,120)	(5,20)	N/A		
Spot	109	20	(100,25)	(5,15)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5611A
Survey Date:	December 14, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

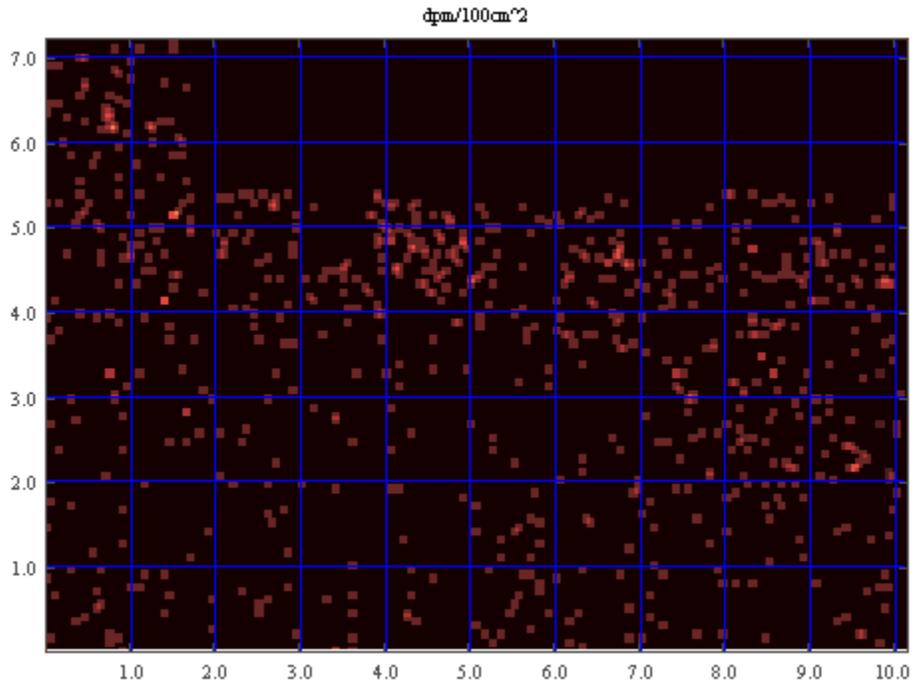


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

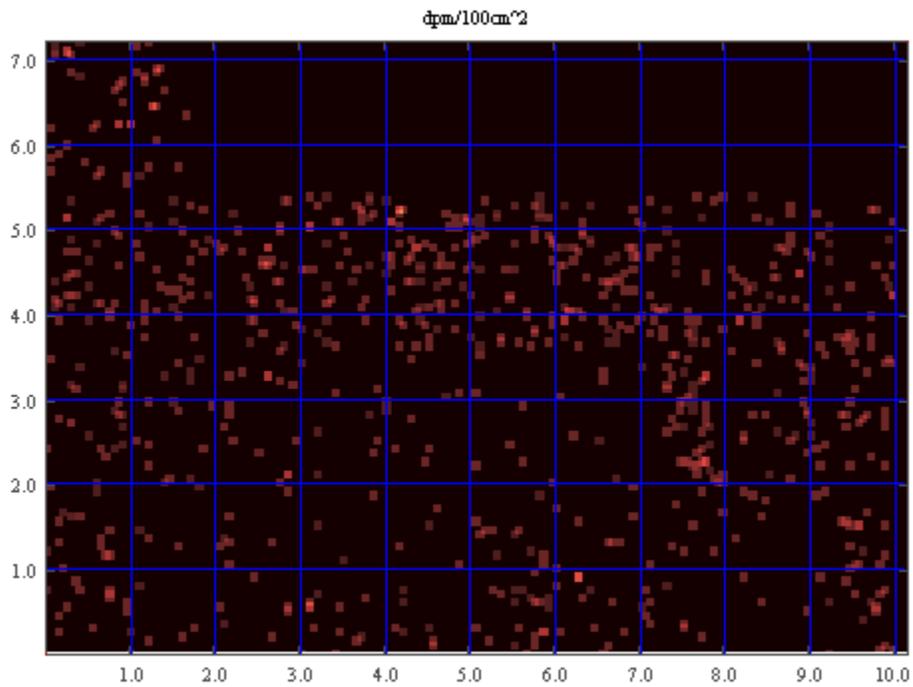


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

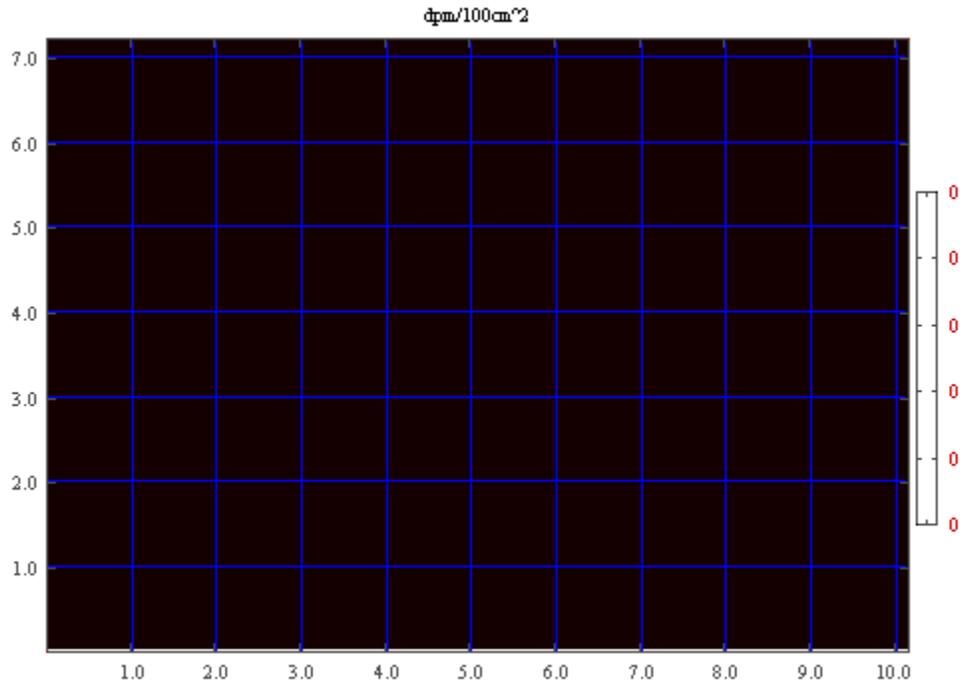


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5621A
Survey Date:	December 14, 2010
Survey Equipment:	SCM9
Detector(s):	C180
Surveyor(s):	PATRICK
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

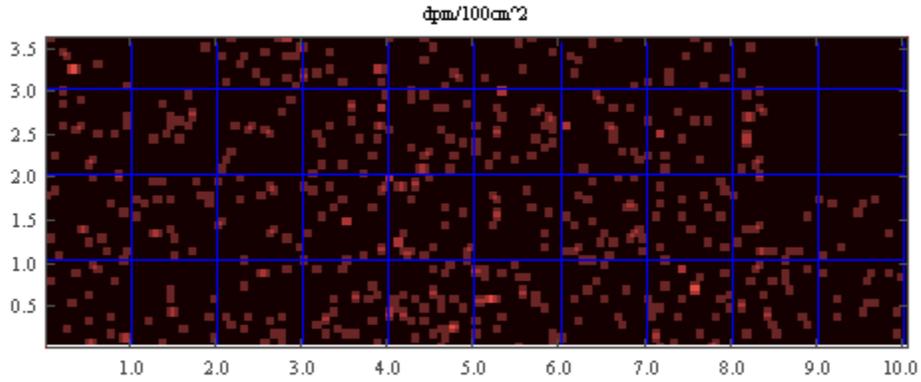


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

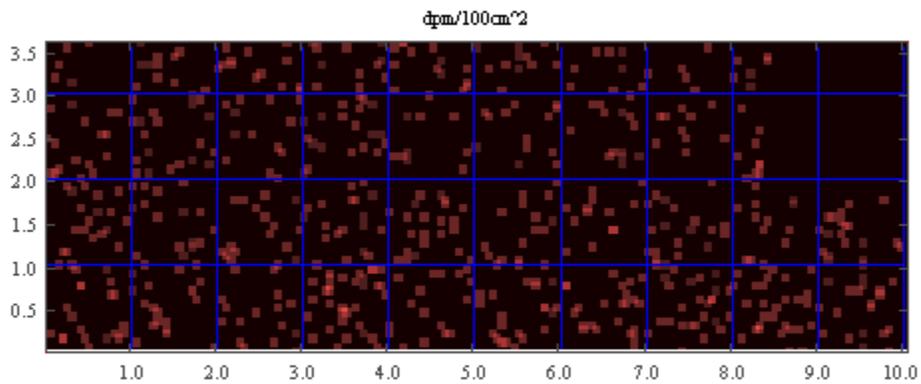


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

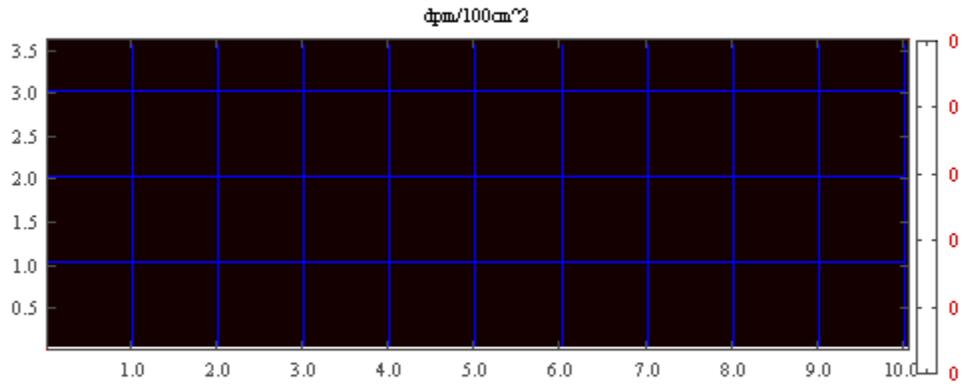


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5701A
Survey Date:	November 25, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	117 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.01 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

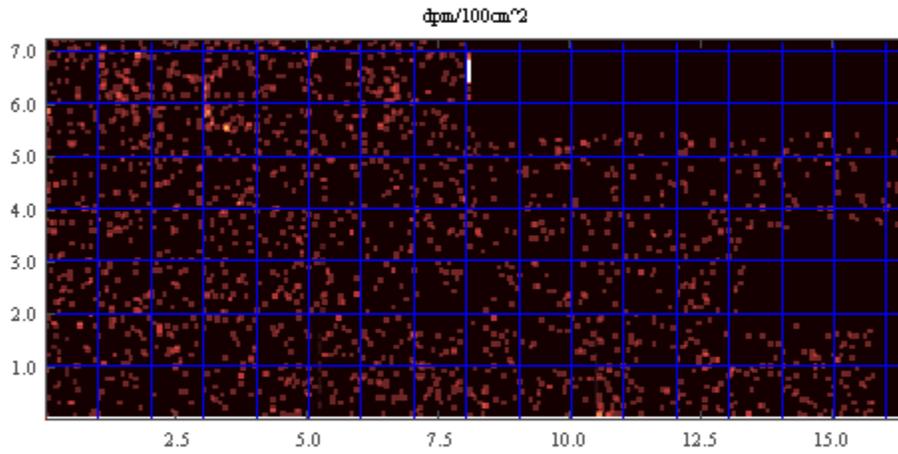


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

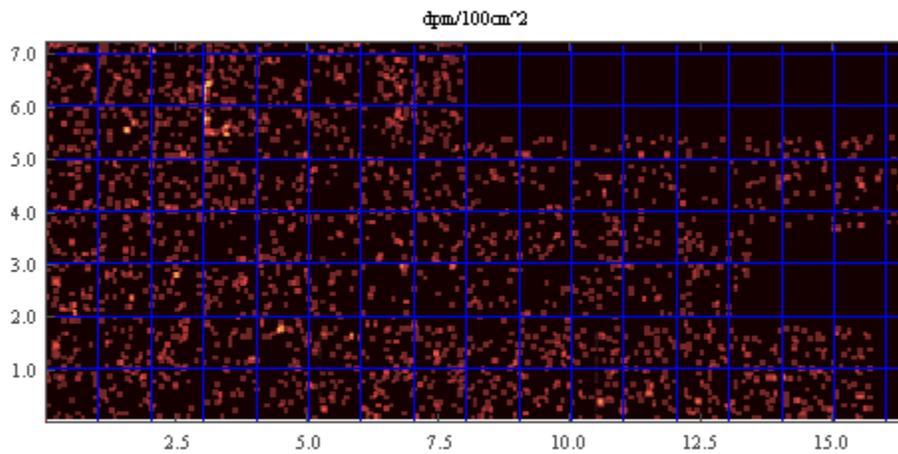


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

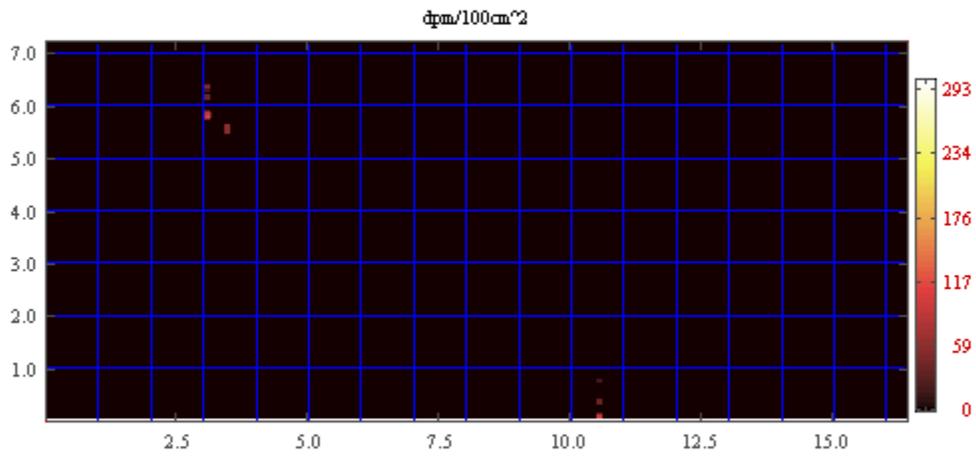


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

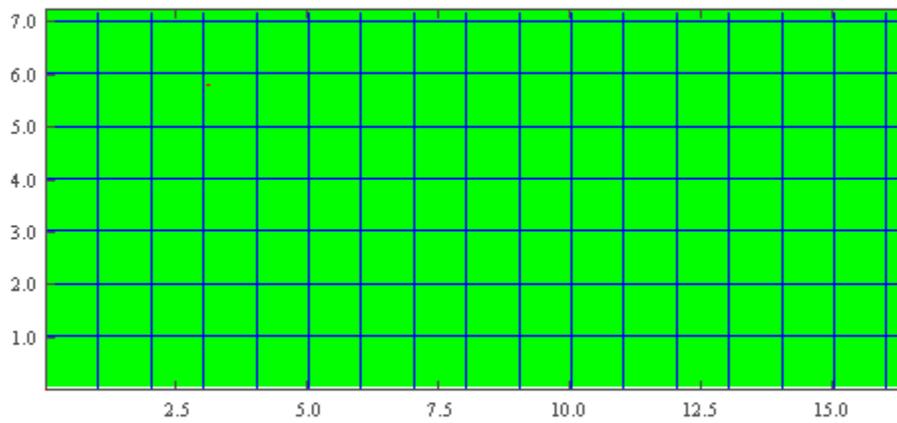


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	117	69	(310,575)	(5,30)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5711A
Survey Date:	November 26, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

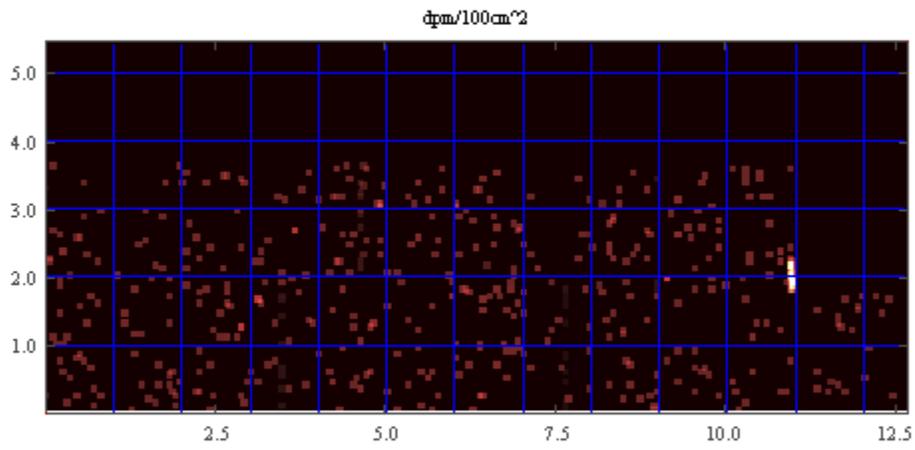


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

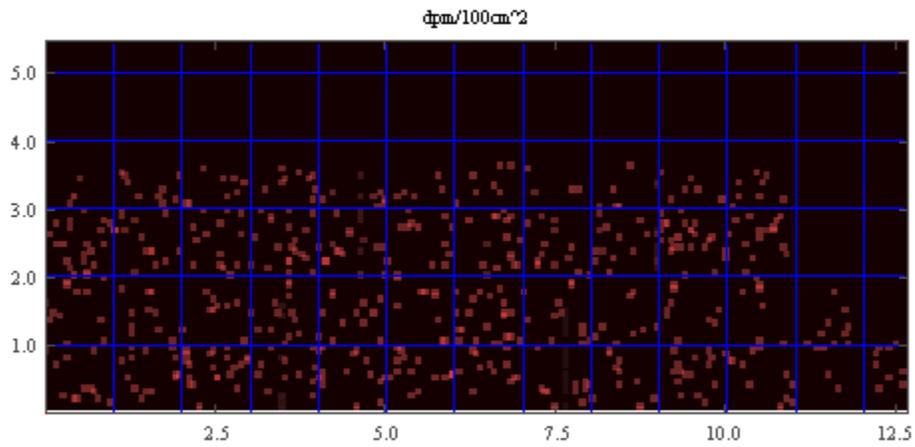


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

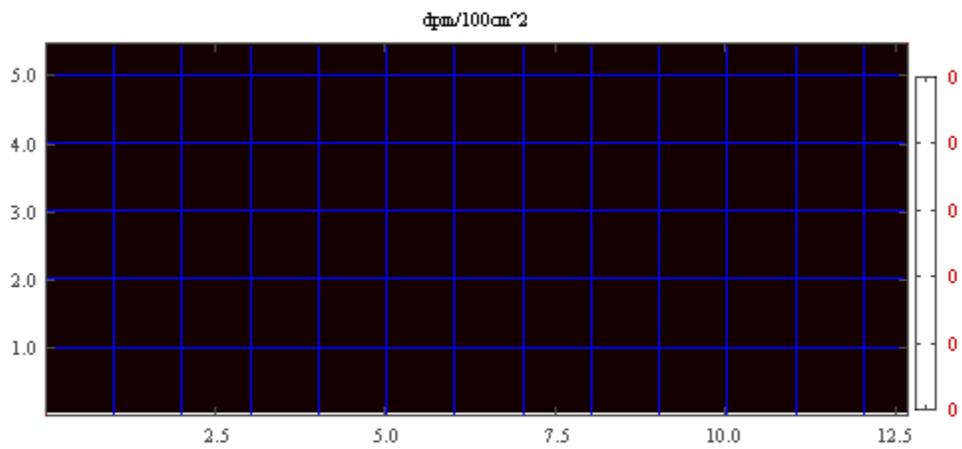


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5711B
Survey Date:	November 26, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

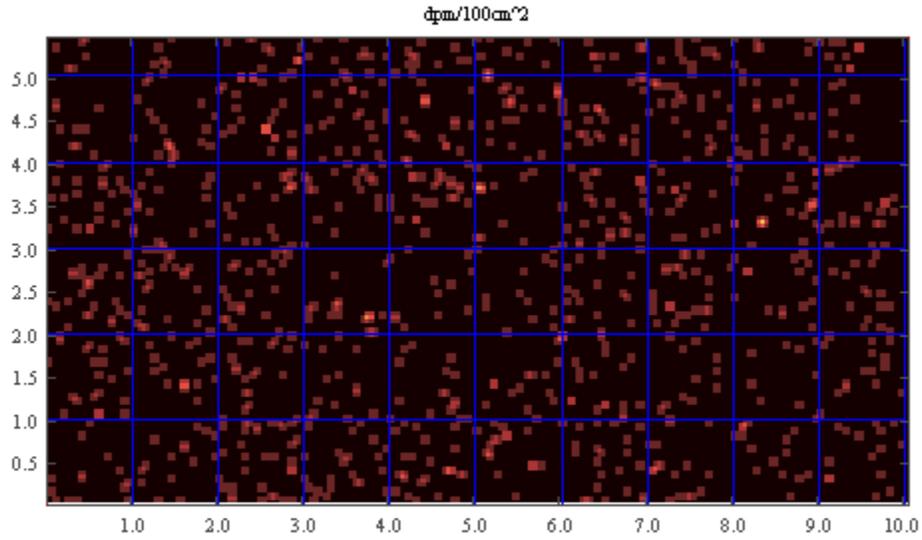


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

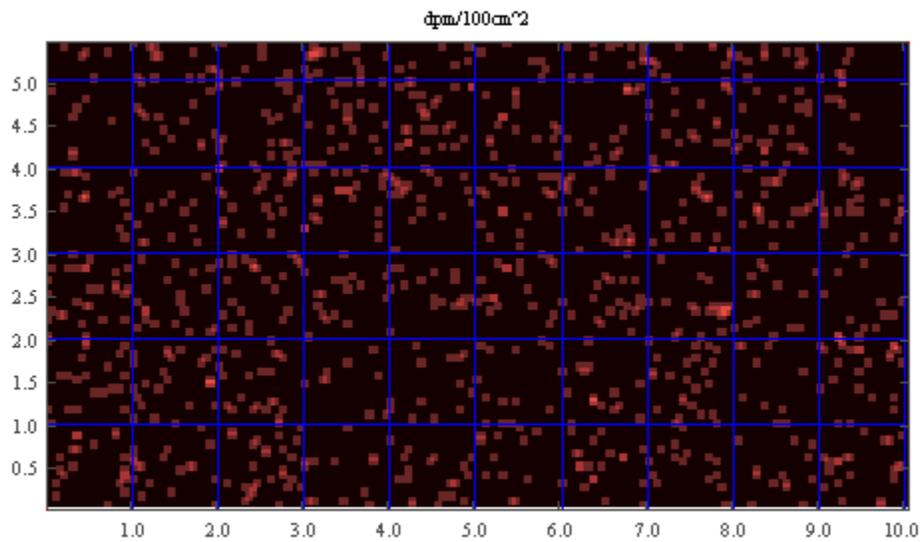


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

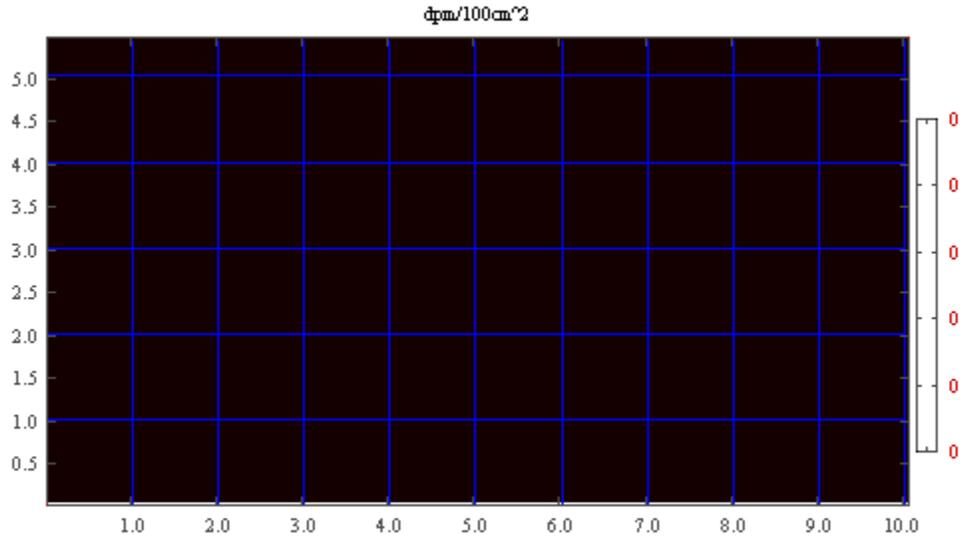


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5711C
Survey Date:	February 14, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

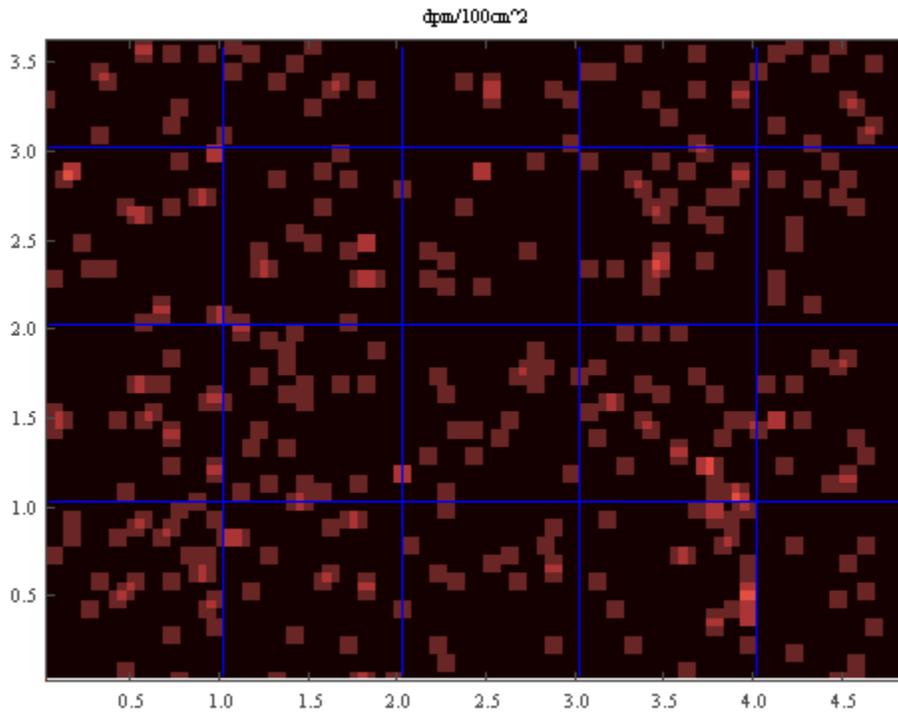


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

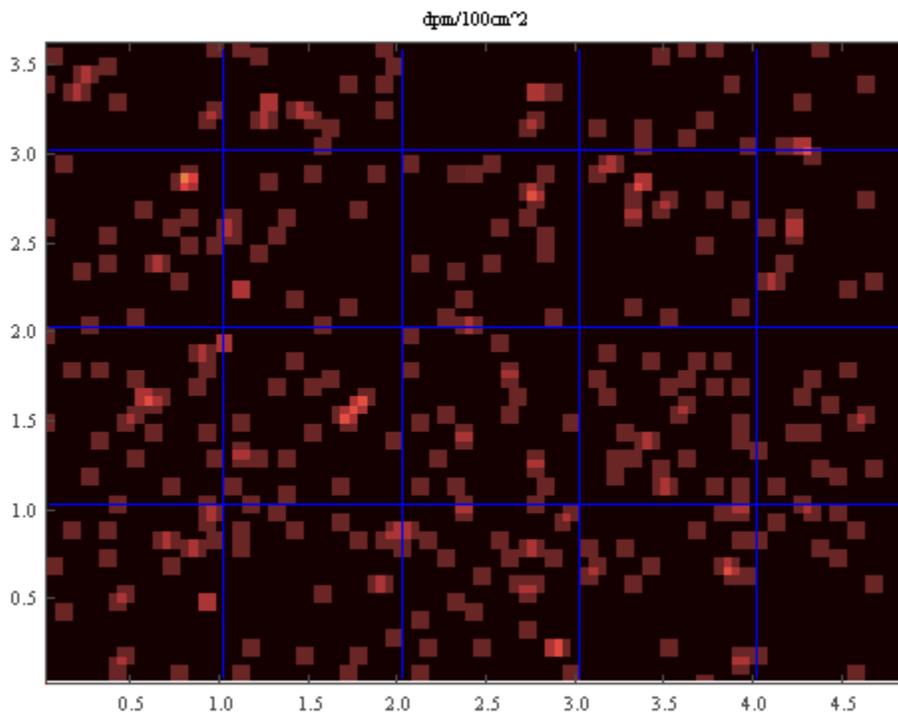


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

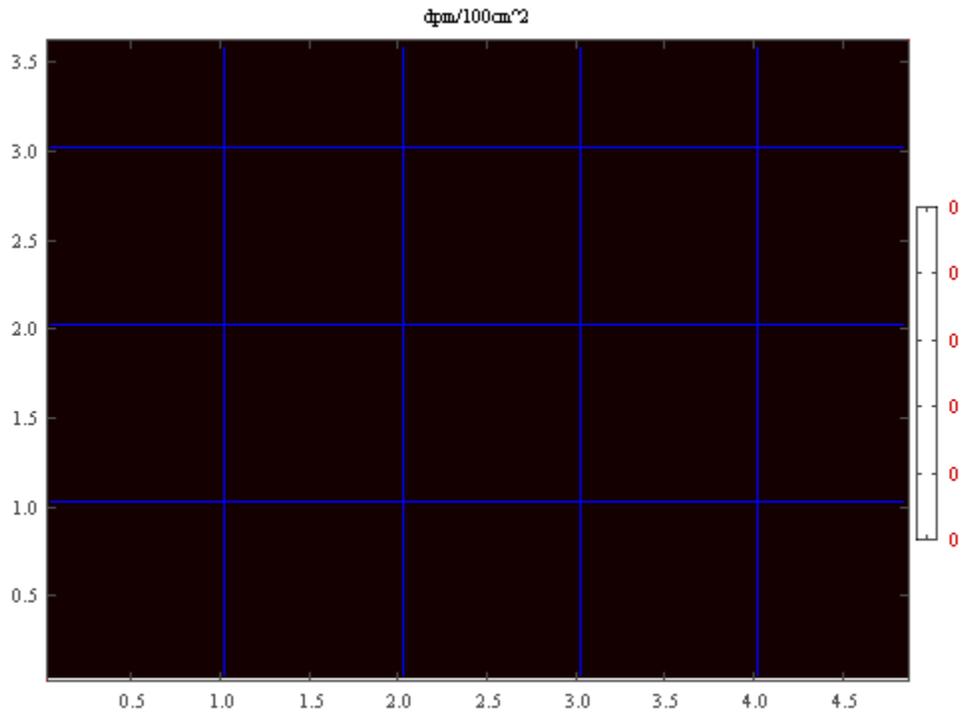


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5711D
Survey Date:	February 22, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

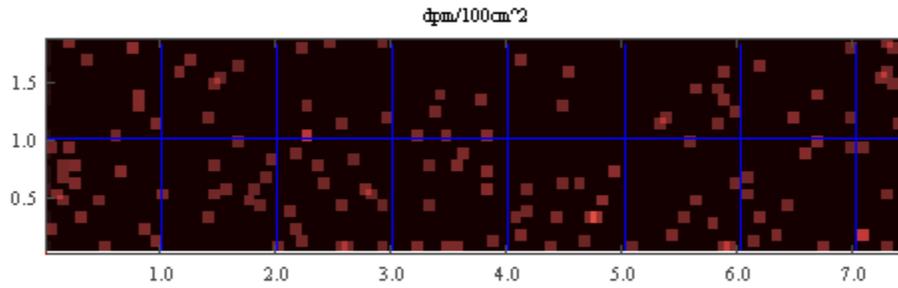


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

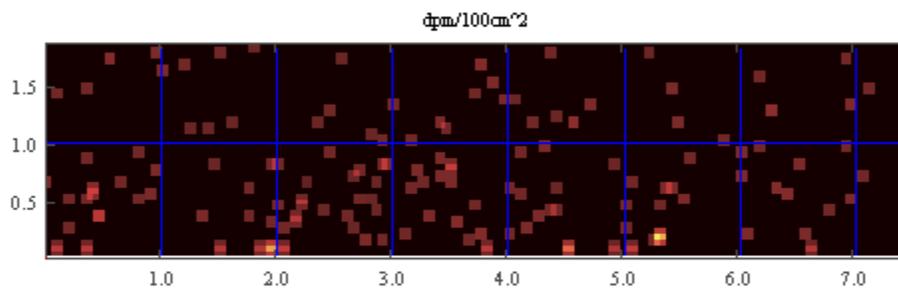


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA5721A
Survey Date:	November 26, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	36,502 dpm/100 cm²
Area Exceeding 100 cm² Levels:	1.88 m ²

This survey is not position correlated.

Primary Detector:

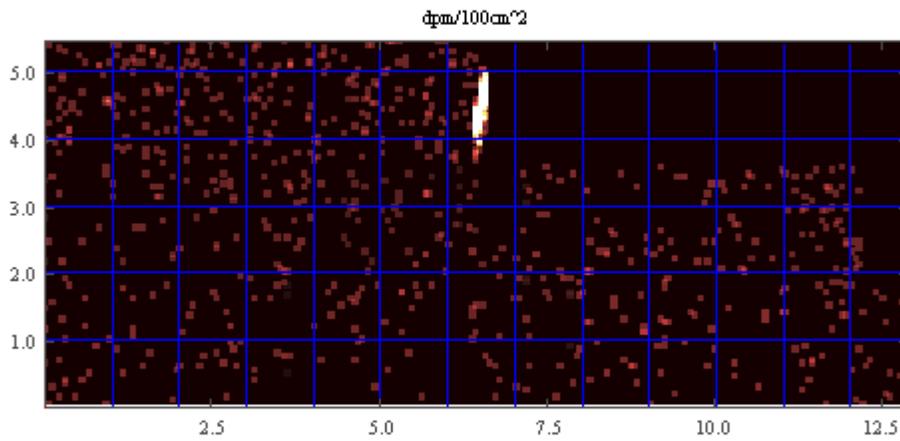


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

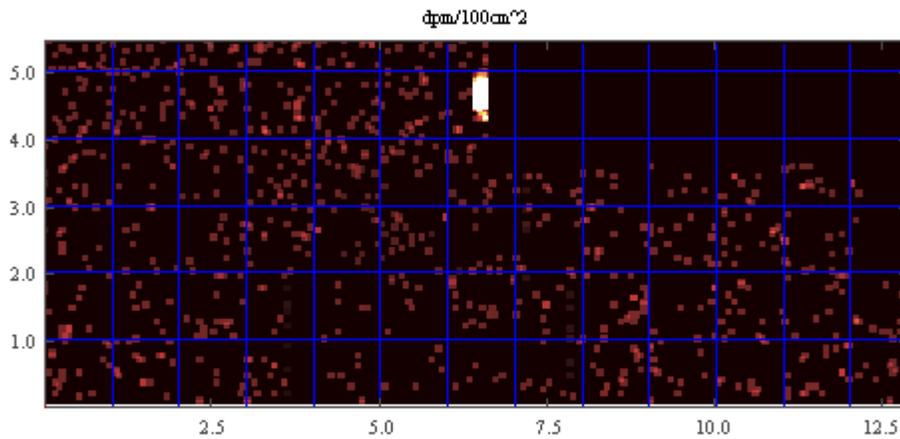


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

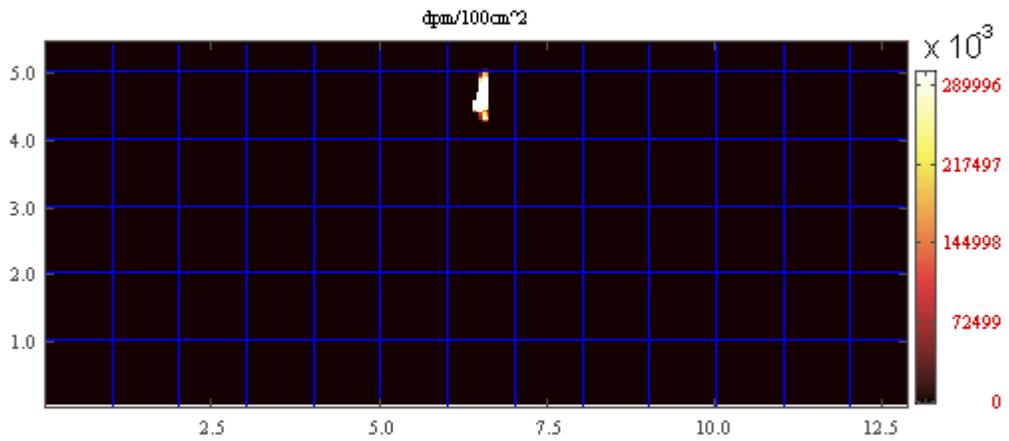


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

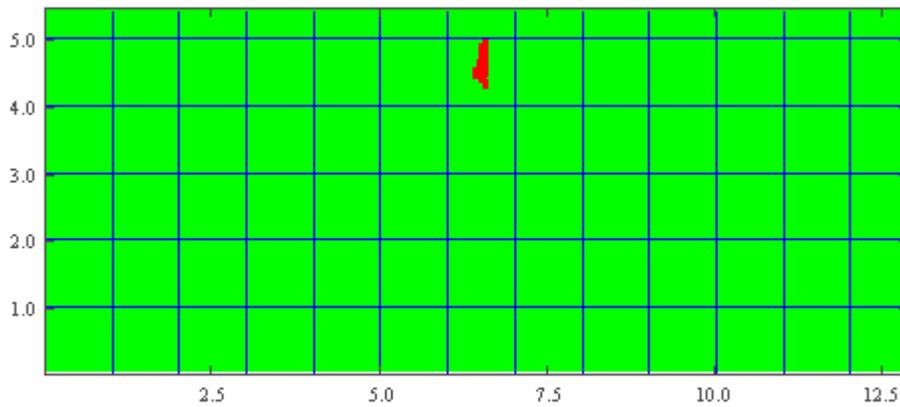


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	36250	163	(655,465)	(0,95)	N/A		
Spot	2508	163	(655,480)	(0,110)	N/A		
Spot	1586	163	(655,450)	(0,80)	N/A		
Spot	487	159	(640,450)	(5,80)	N/A		
Spot	272	163	(655,430)	(0,60)	N/A		
Spot	194	163	(655,495)	(0,125)	N/A		
Grid	1121	N/A	N/A	N/A	(7,5)		
Grid	1116	N/A	N/A	N/A	(7,6)		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5731A
Survey Date:	March 4, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

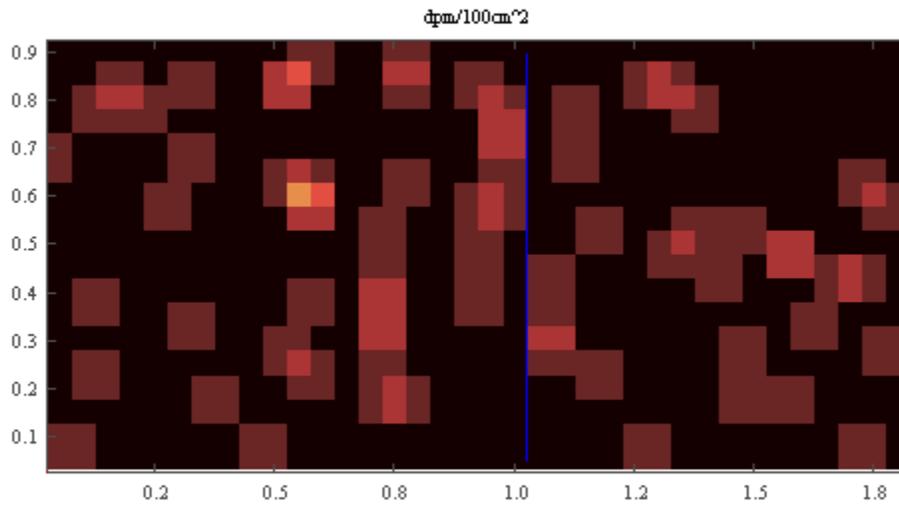


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

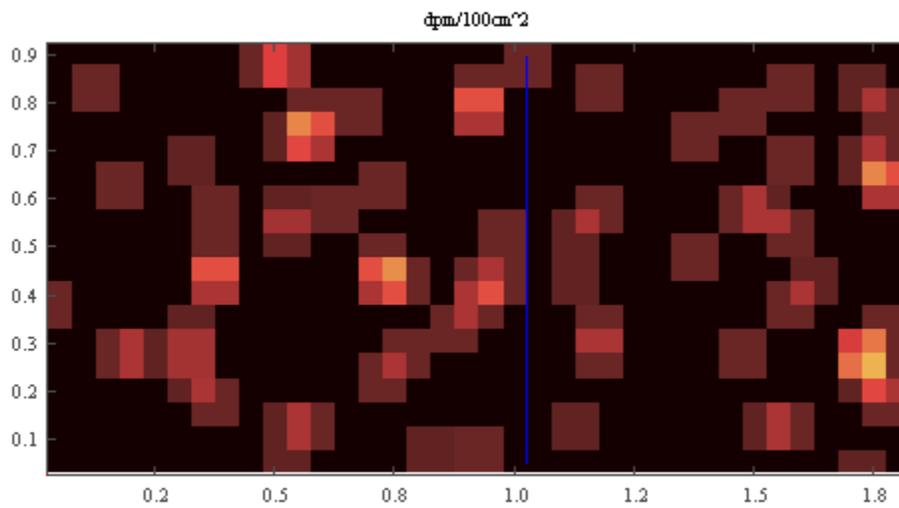


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

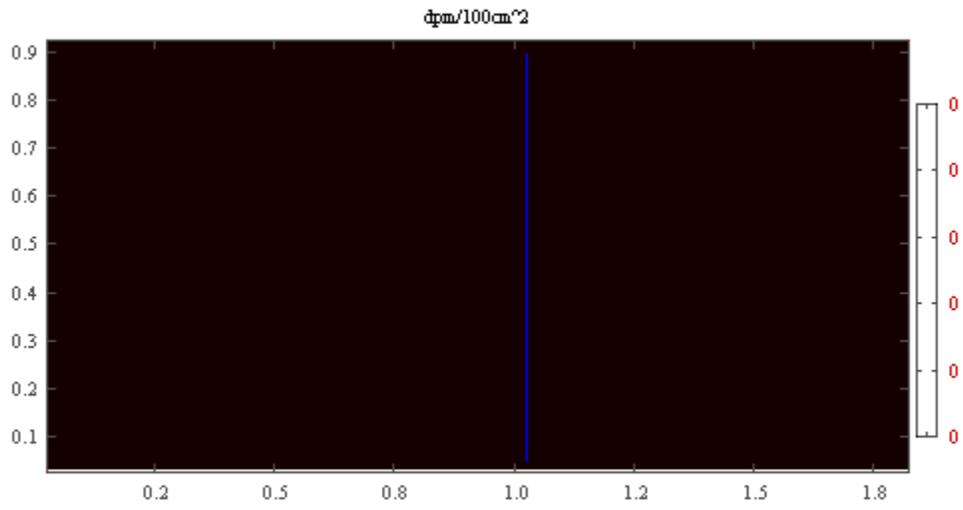


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5801A
Survey Date:	February 9, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	426 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.06 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

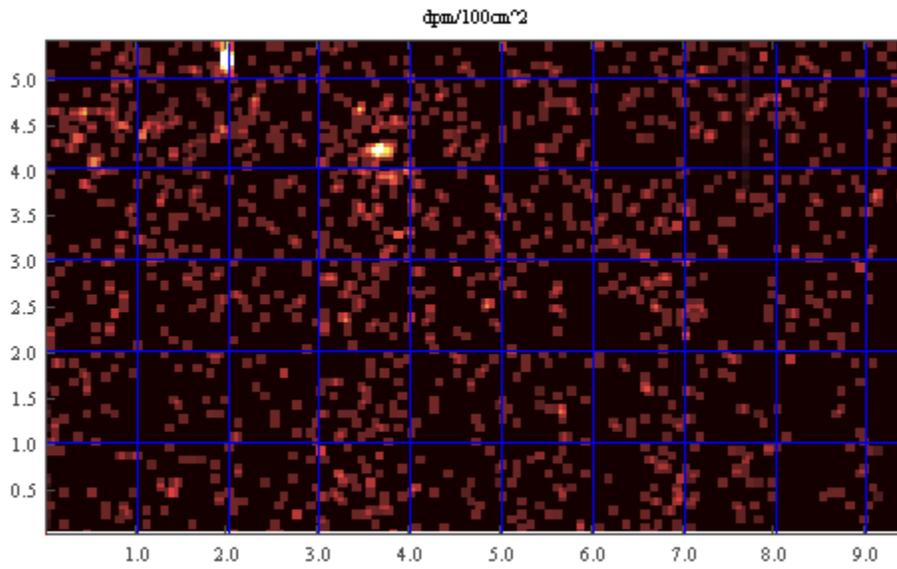


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

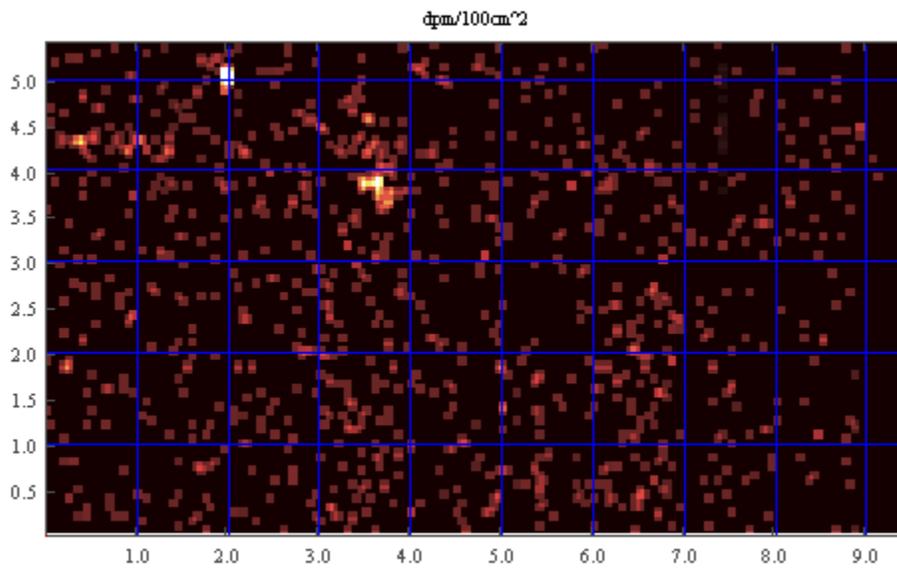


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

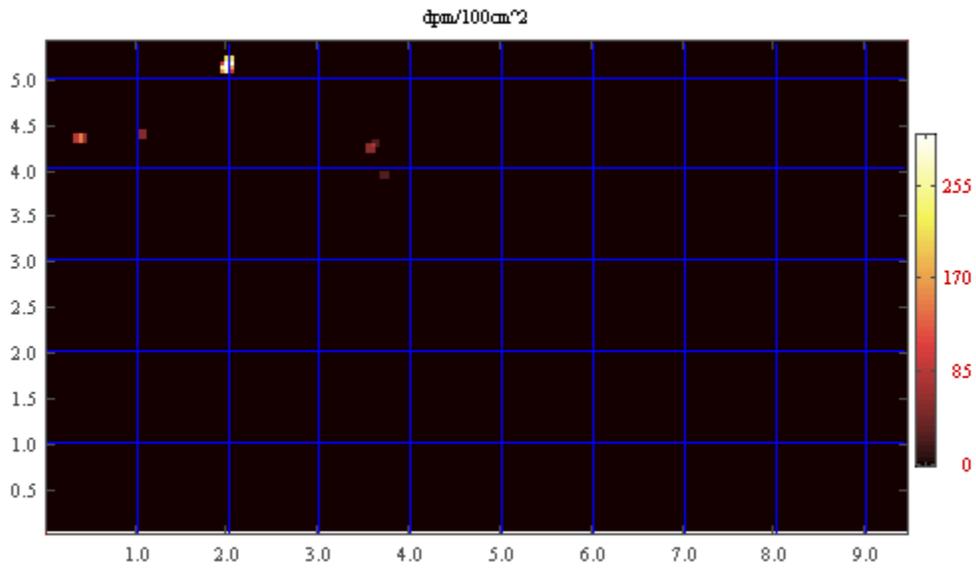


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

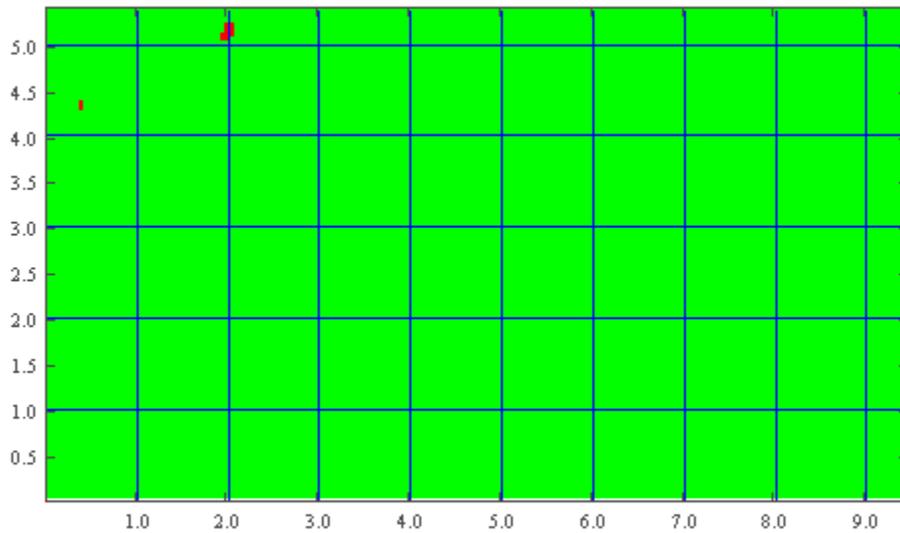


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	426	1	(200,510)	(195,145)	N/A		
Spot	148	1	(40,430)	(35,65)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5801B
Survey Date:	February 11, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

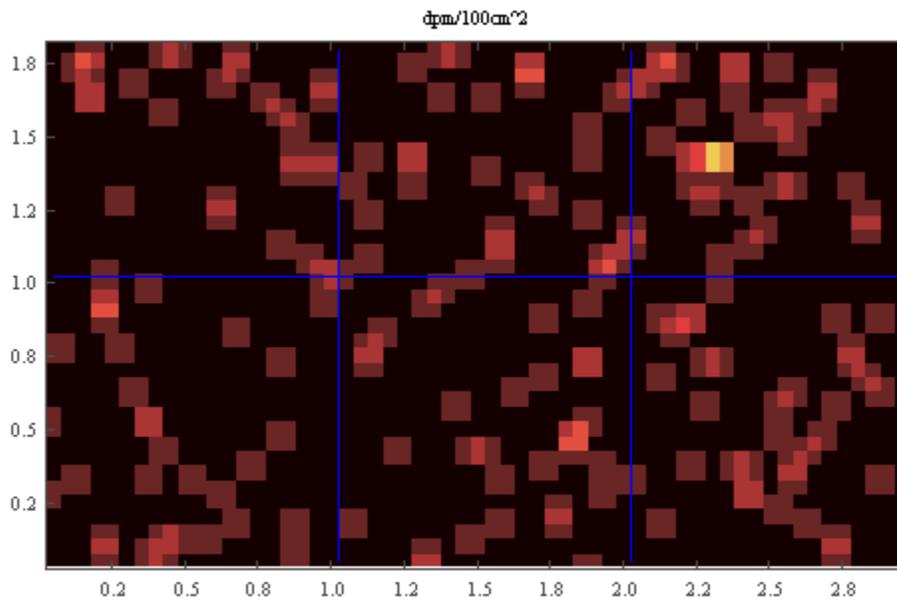


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

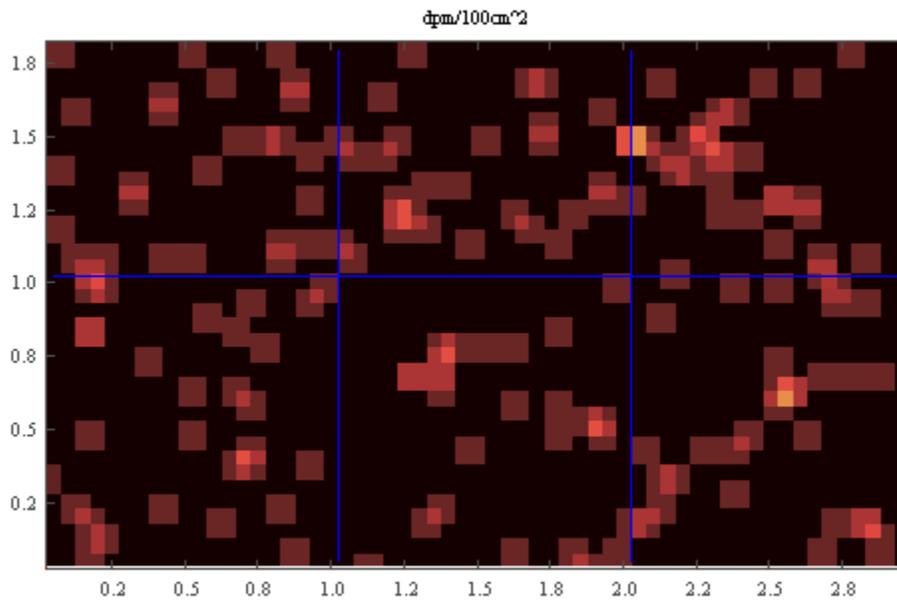


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

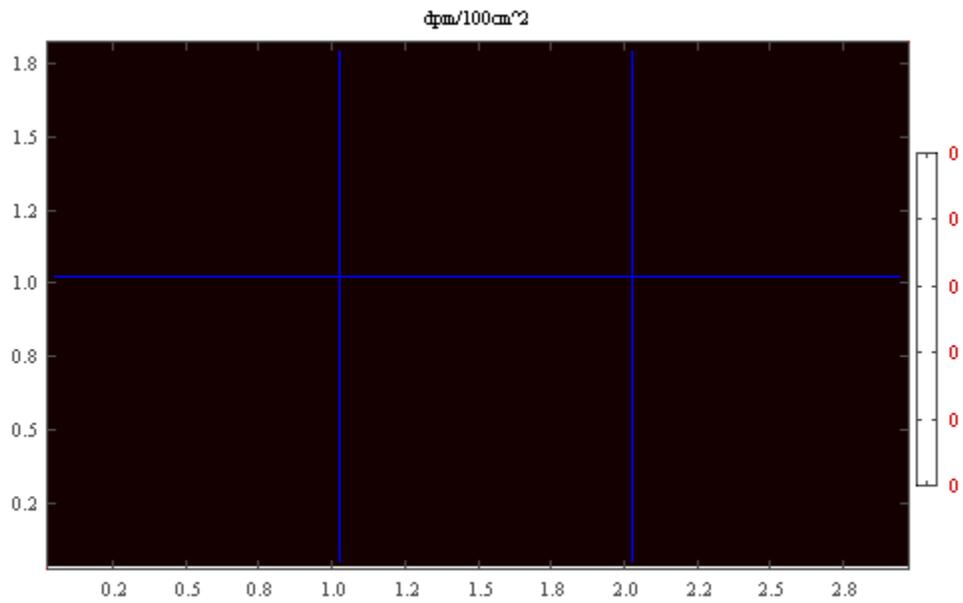


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5811A
Survey Date:	February 28, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	2,360 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.42 m ²

This survey is not position correlated.

Primary Detector:

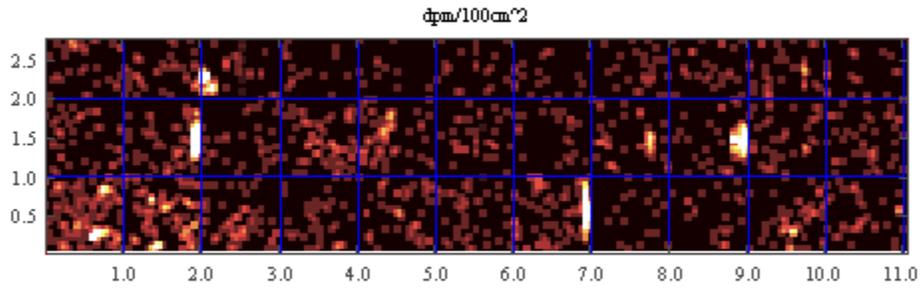


Figure 1: Meter Grid overlaid onto image plot of 100cm^2 areas..

Recount Detector:

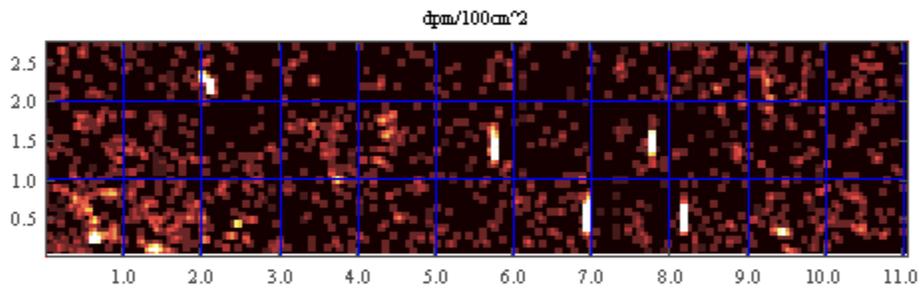


Figure 2: Meter Grid overlaid onto image plot of 100cm^2 areas..

Coincidence Logic:

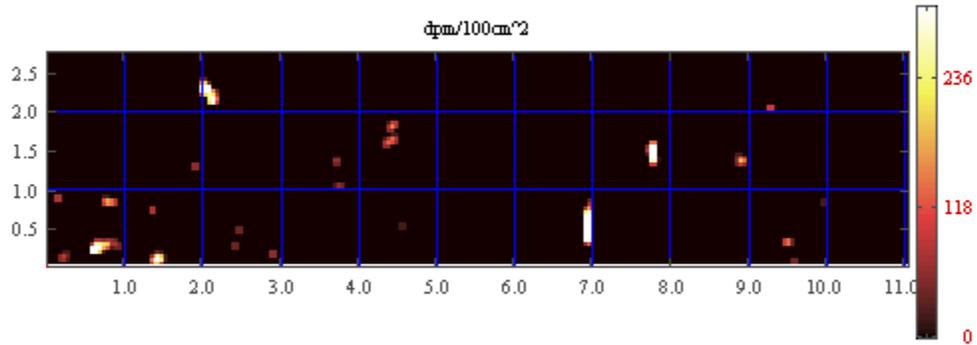


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

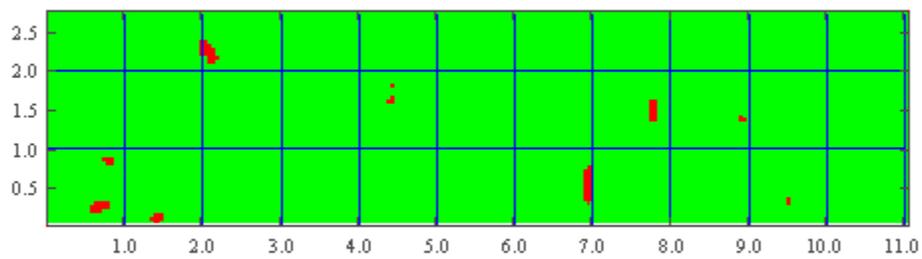


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	2360	140	(695,50)	(0,40)	N/A		
Spot	1034	140	(695,65)	(0,55)	N/A		
Spot	828	14	(65,25)	(0,15)	N/A		
Spot	661	482	(205,225)	(0,35)	N/A		
Spot	624	140	(695,35)	(0,25)	N/A		
Spot	430	376	(775,150)	(0,50)	N/A		
Spot	419	30	(145,10)	(0,0)	N/A		
Spot	312	484	(215,210)	(0,20)	N/A		
Spot	283	376	(780,135)	(5,35)	N/A		
Spot	195	16	(80,30)	(5,20)	N/A		
Spot	195	398	(890,135)	(5,35)	N/A		
Spot	176	16	(80,85)	(5,75)	N/A		
Spot	155	310	(445,180)	(0,80)	N/A		
Spot	137	190	(950,30)	(5,20)	N/A		
Spot	135	308	(440,160)	(5,60)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5821B
Survey Date:	March 3, 2011
Survey Equipment:	SCM8
Detector(s):	C90
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	468 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.28 m ²

This survey is not position correlated.

Primary Detector:

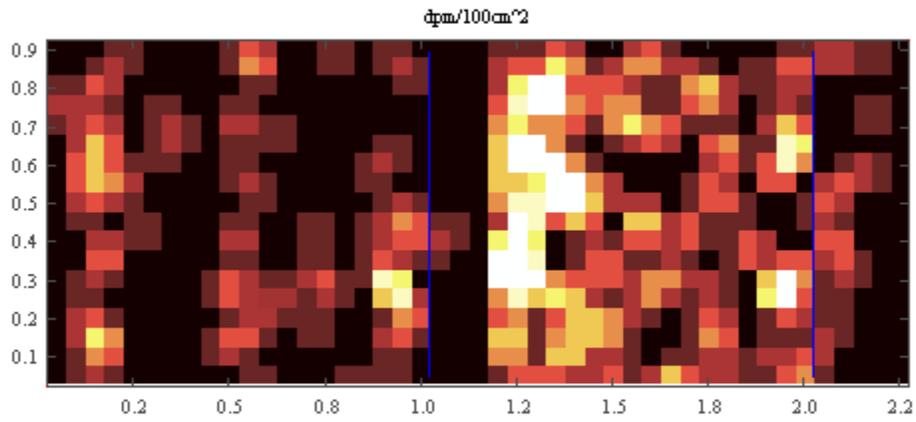


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

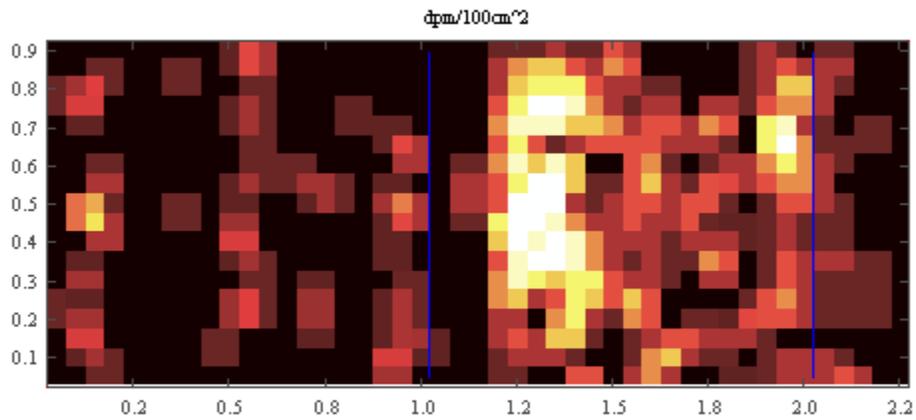


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

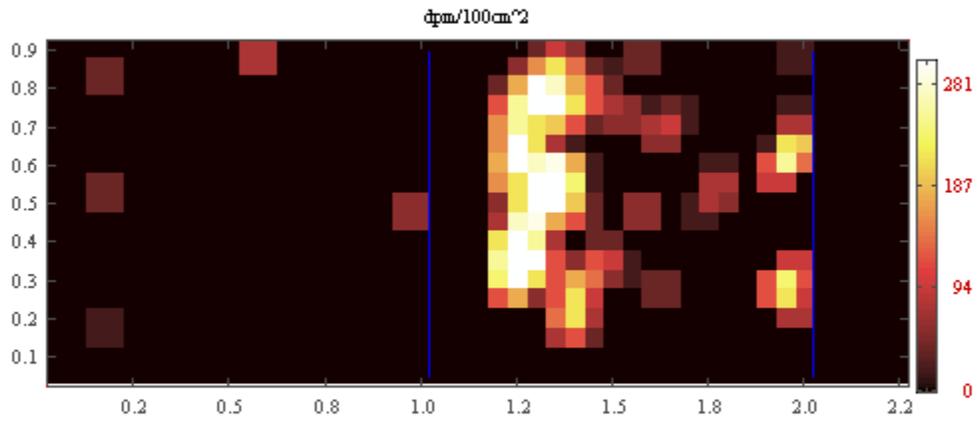


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

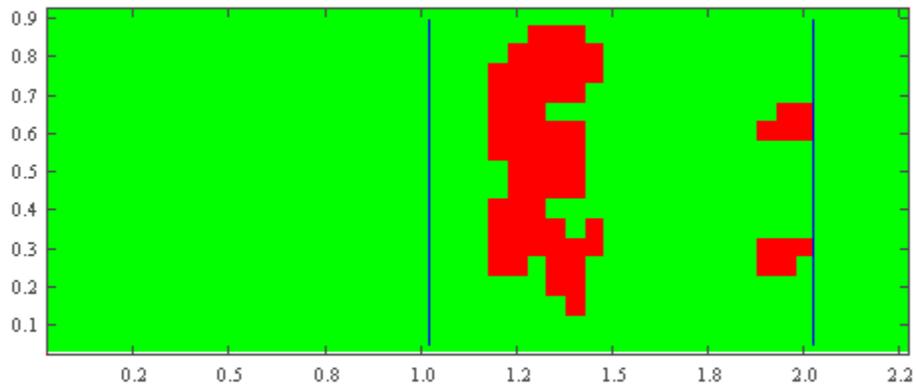


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	468	26	(125,35)	(0,30)	N/A		
Spot	468	28	(135,55)	(0,50)	N/A		
Spot	351	26	(130,75)	(5,70)	N/A		
Spot	254	40	(195,60)	(0,55)	N/A		
Spot	234	40	(195,30)	(0,25)	N/A		
Spot	215	28	(140,20)	(5,15)	N/A		
Spot	176	24	(120,60)	(5,55)	N/A		
Spot	117	30	(145,35)	(0,30)	N/A		
Spot	117	30	(145,75)	(0,70)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5831A
Survey Date:	March 3, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	254 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.06 m ²

This survey is not position correlated.

Primary Detector:

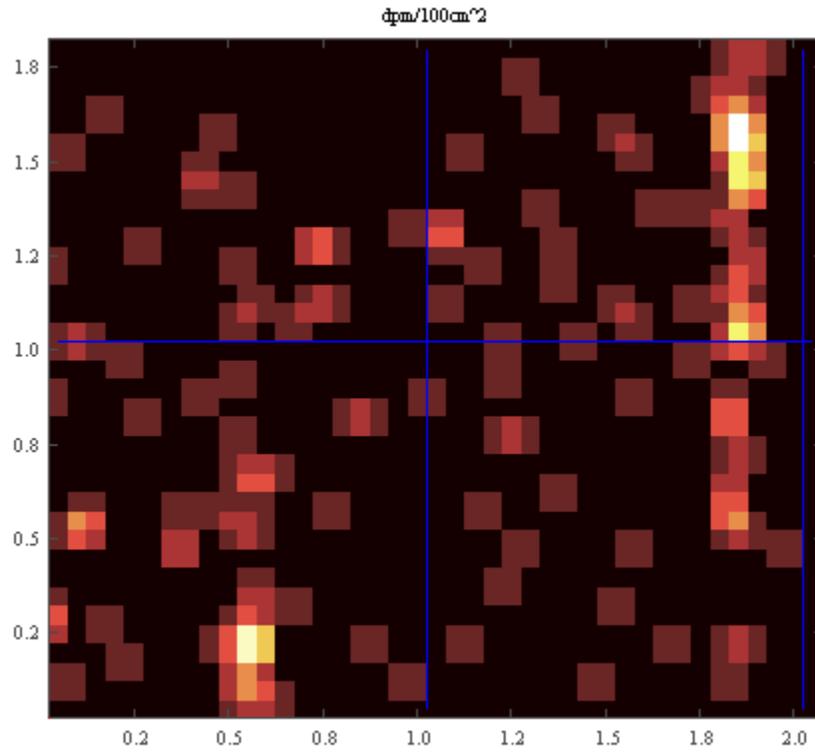


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

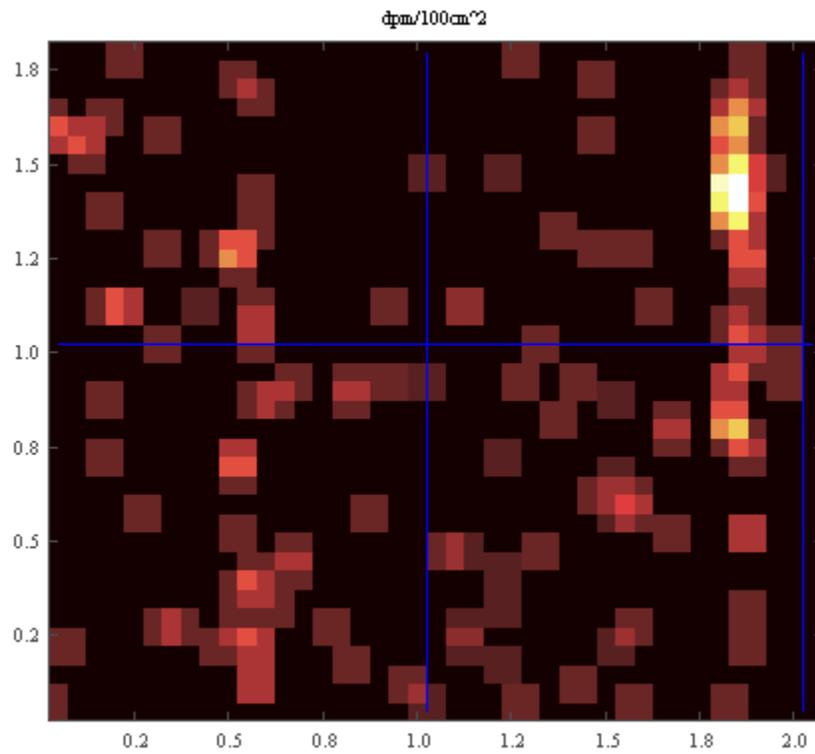


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

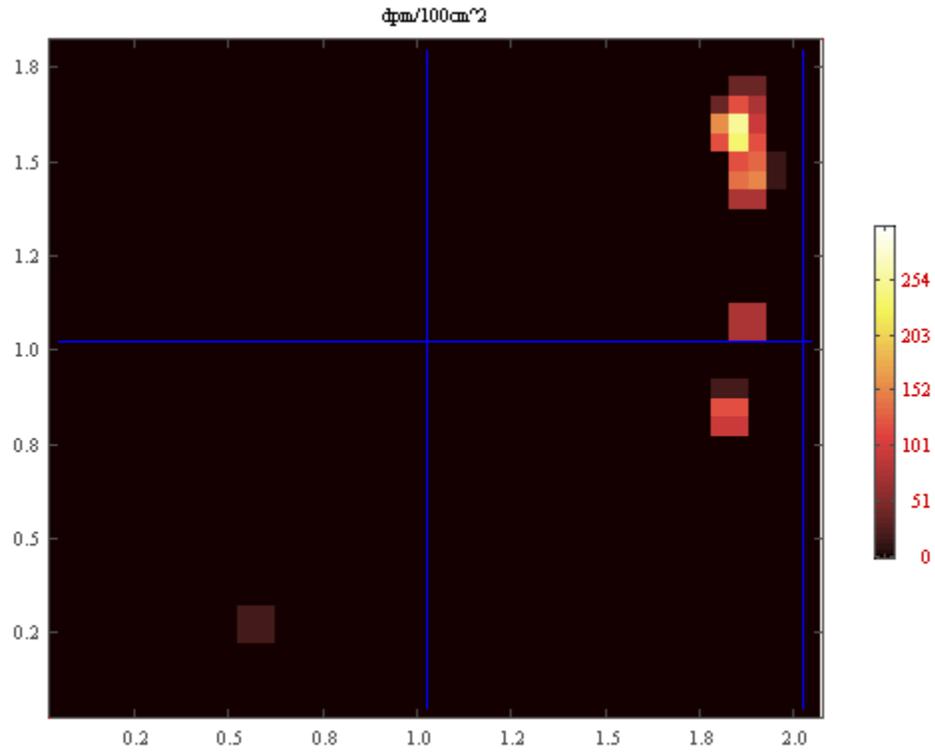


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

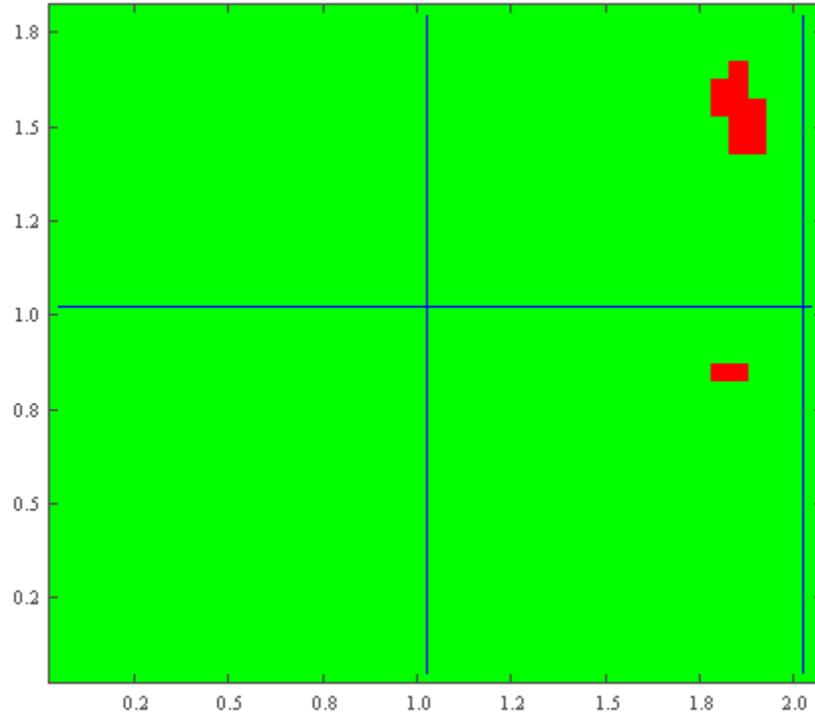


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	254	38	(185,160)	(0,155)	N/A		
Spot	151	38	(190,145)	(5,140)	N/A		
Spot	117	36	(180,85)	(5,80)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5901A
Survey Date:	February 16, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

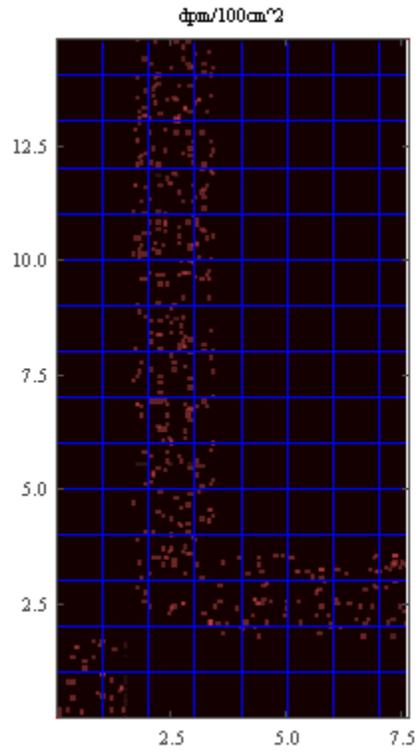


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

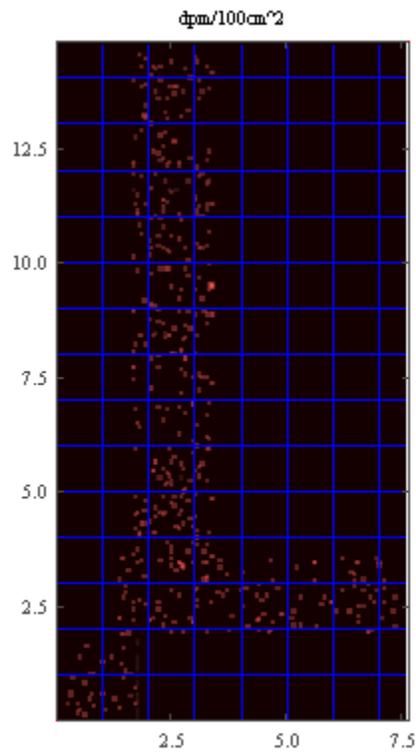


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

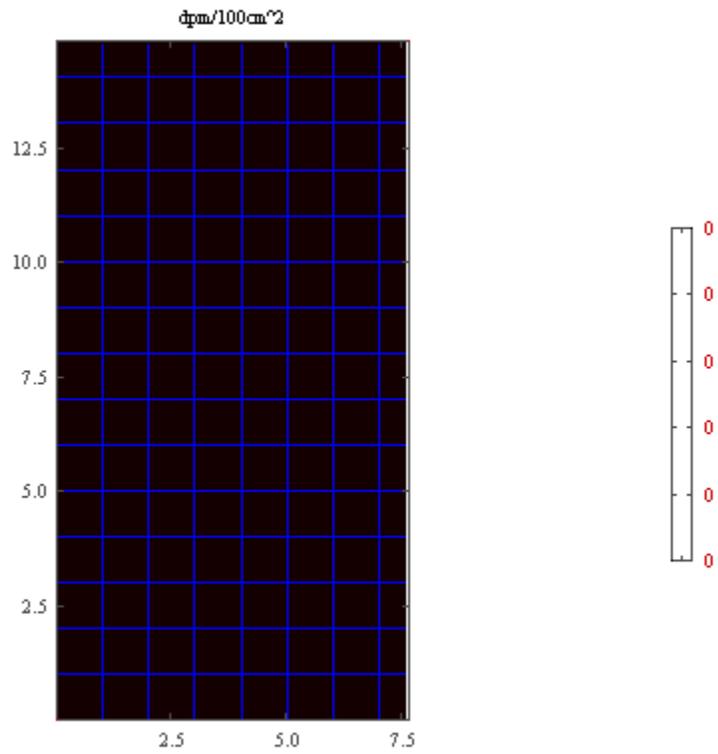


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA5901B
Survey Date:	March 2, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	234 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.07 m ²

This survey is not position correlated.

Primary Detector:

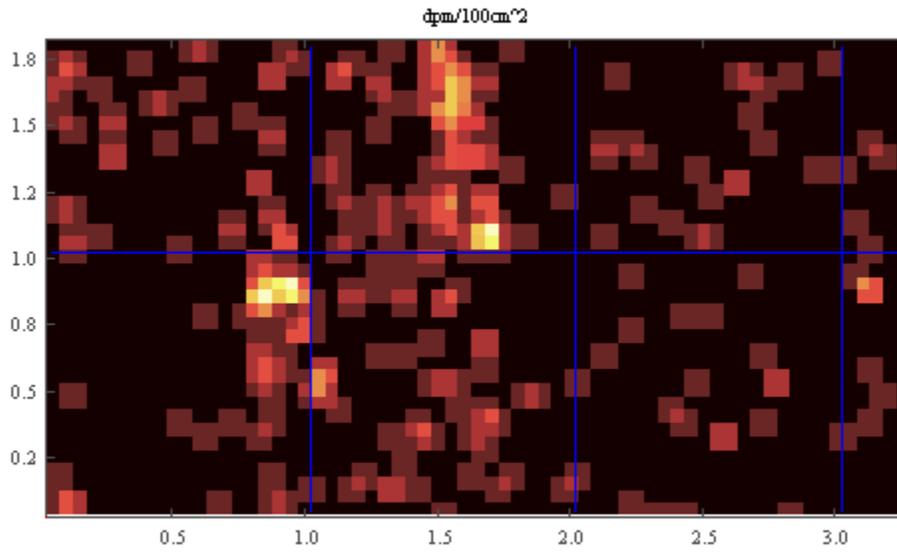


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

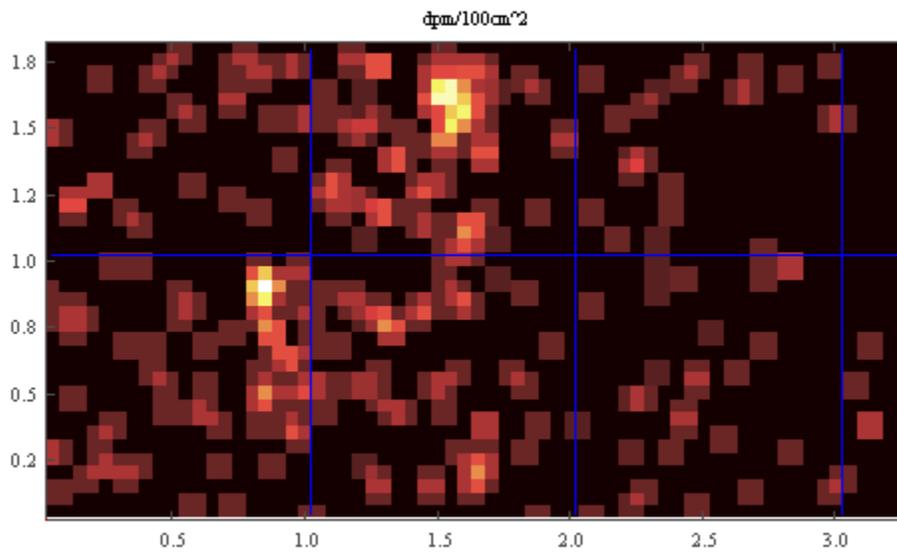


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

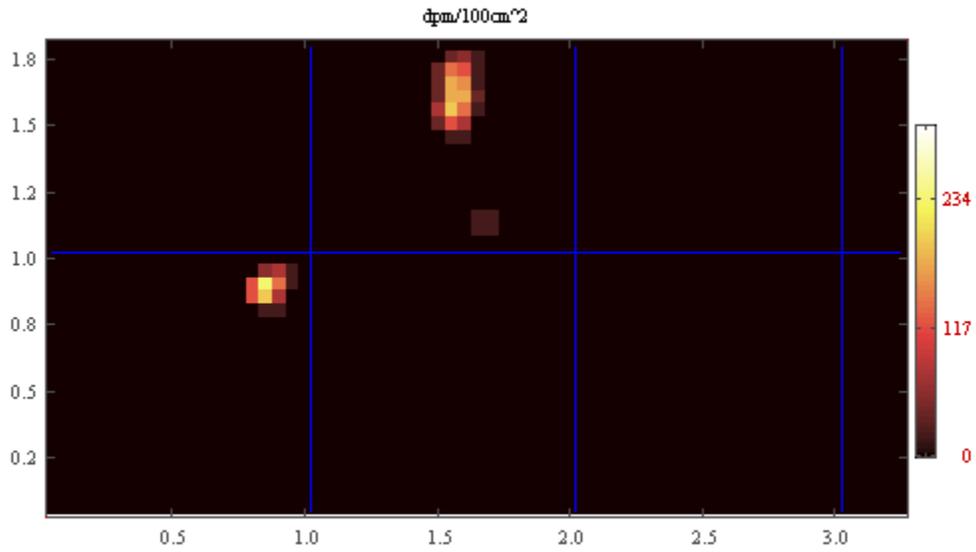


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

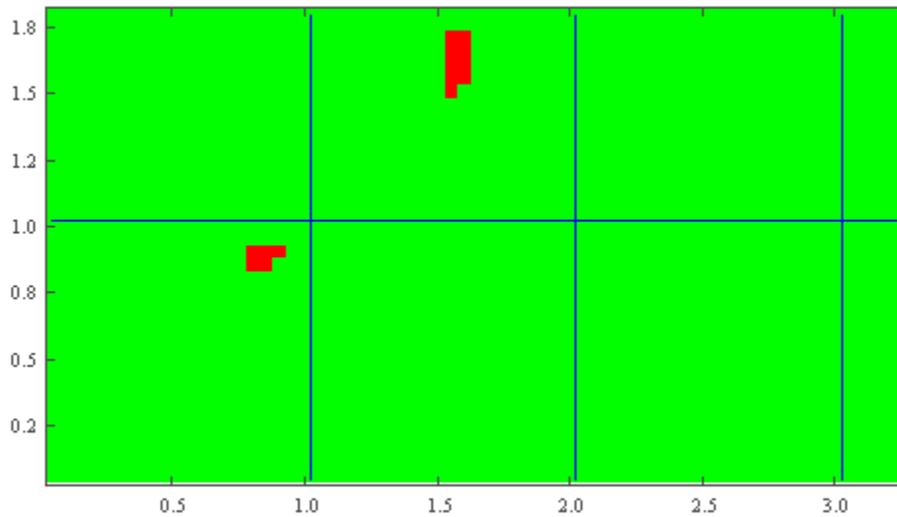


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	234	18	(85,90)	(0,85)	N/A		
Spot	194	32	(155,155)	(0,150)	N/A		
Spot	136	32	(155,170)	(0,165)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Survey Report

Survey File Name:	FA5911A
Survey Date:	February 16, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

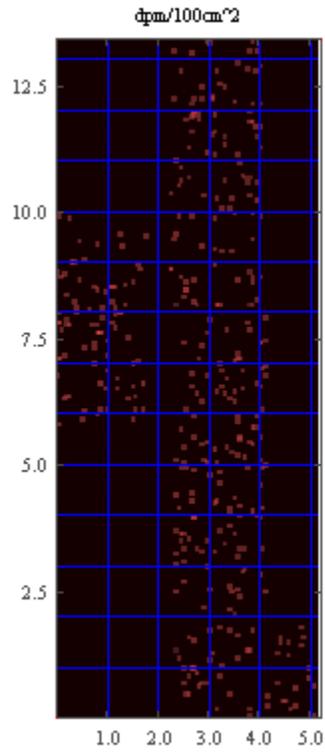


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

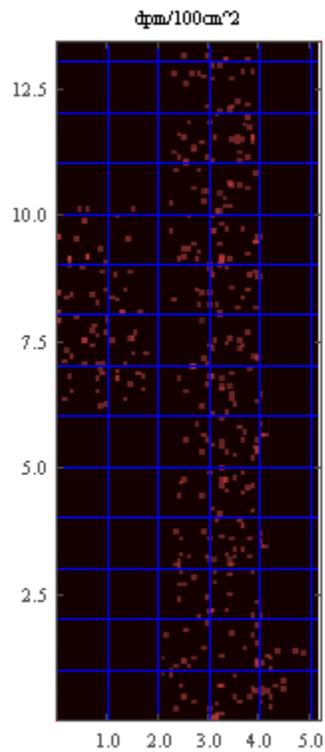


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

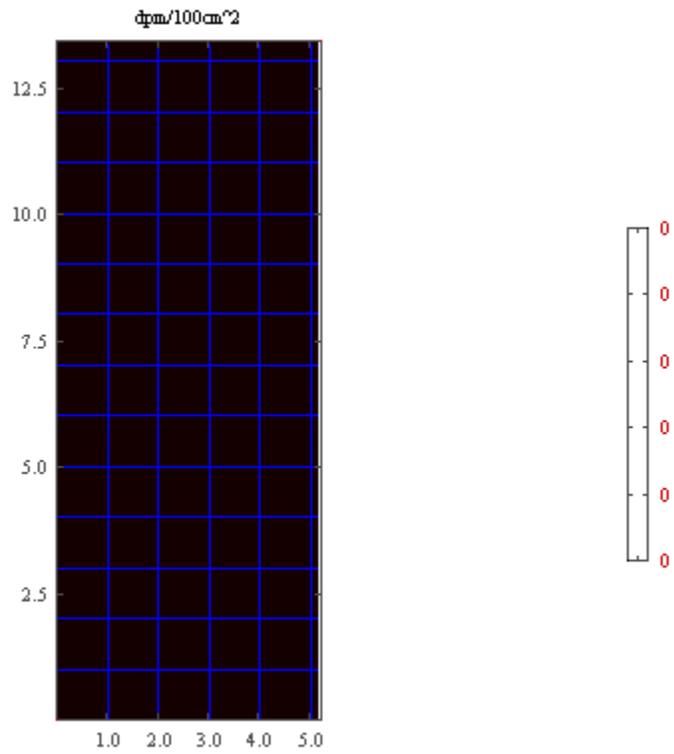


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6001A
Survey Date:	February 14, 2011
Survey Equipment:	SCM4
Detector(s):	R180
Surveyor(s):	KIRBY/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

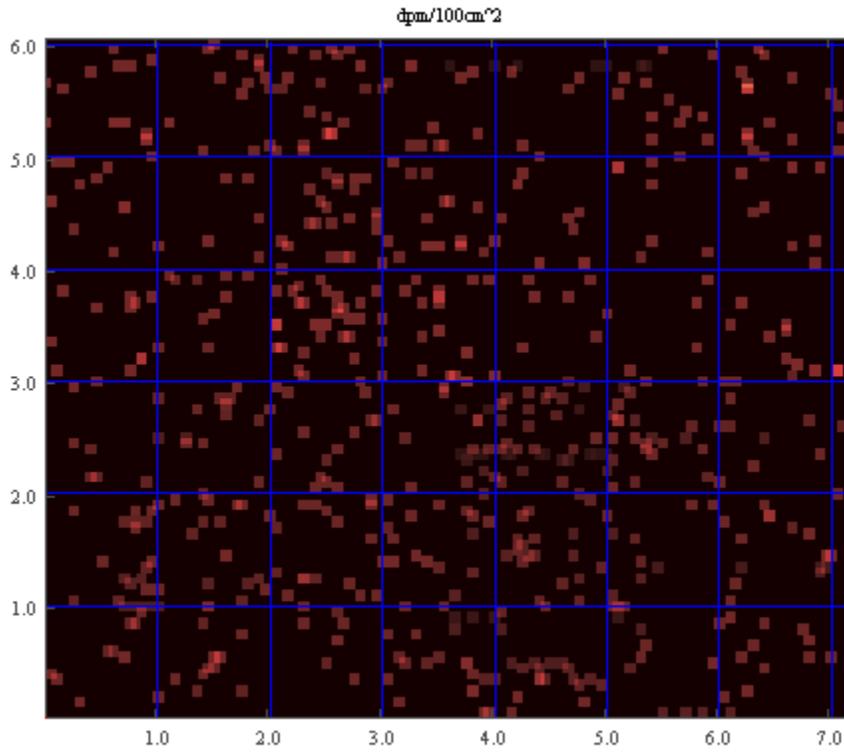


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

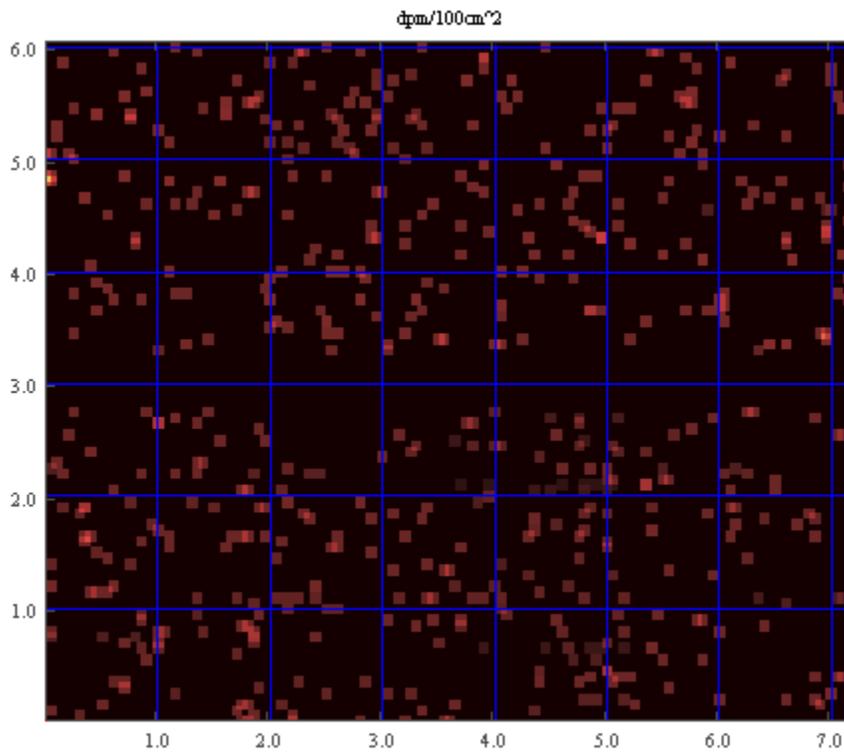


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Survey Report

Survey File Name:	FA6011A
Survey Date:	December 10, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

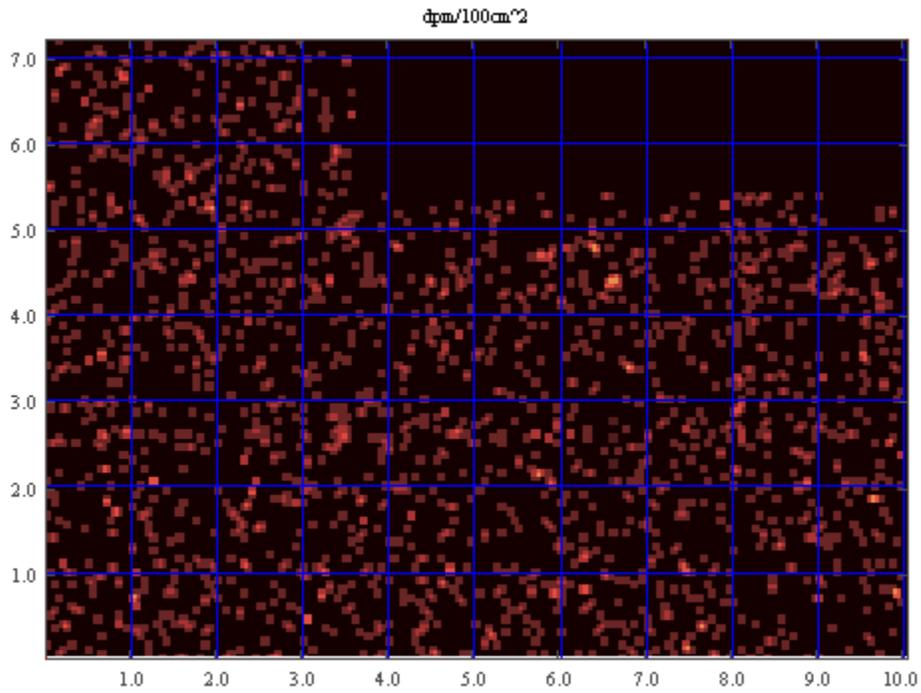


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

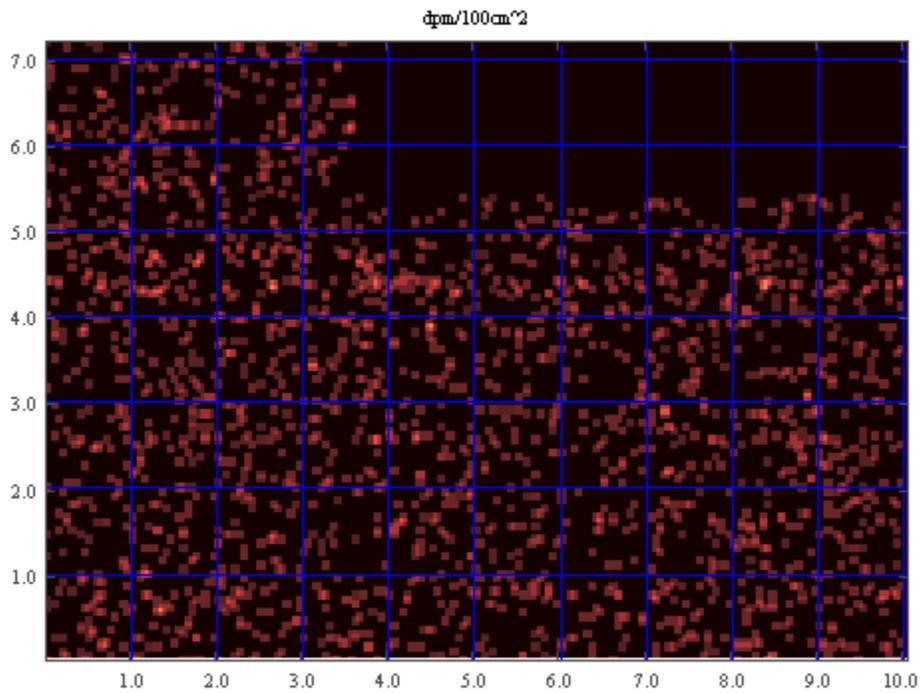


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

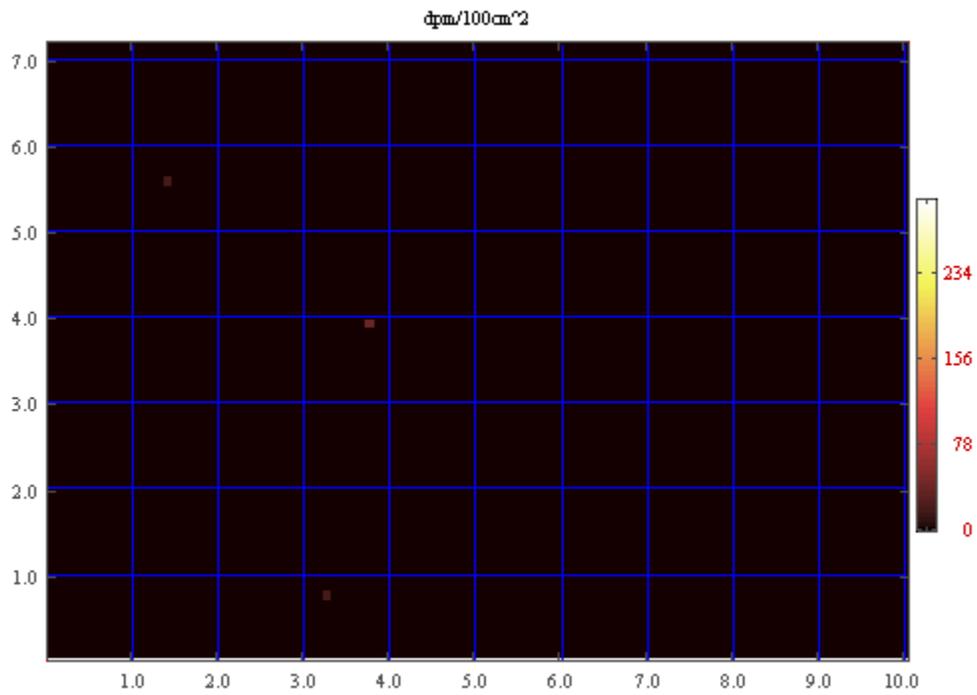


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6021A
Survey Date:	December 10, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

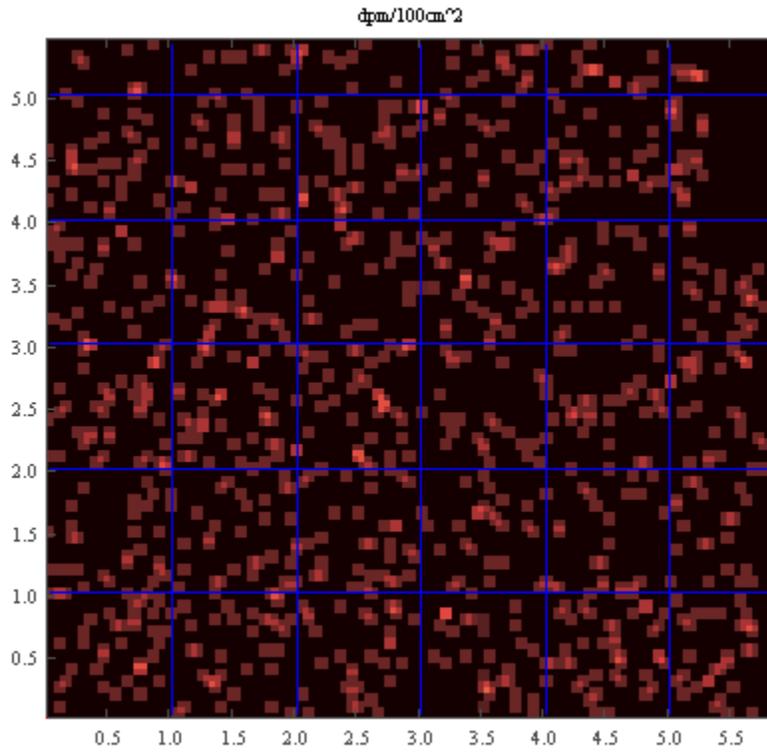


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

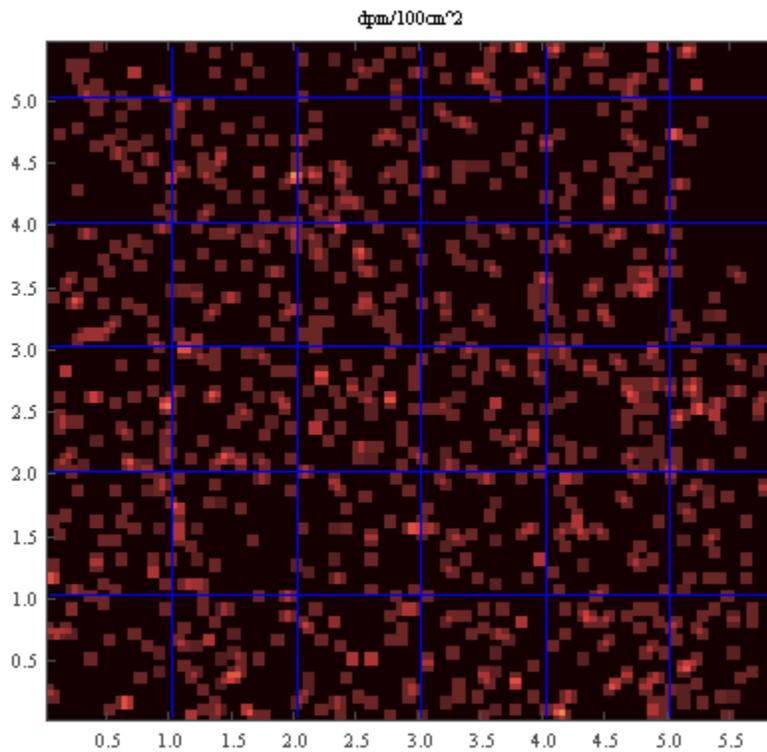


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

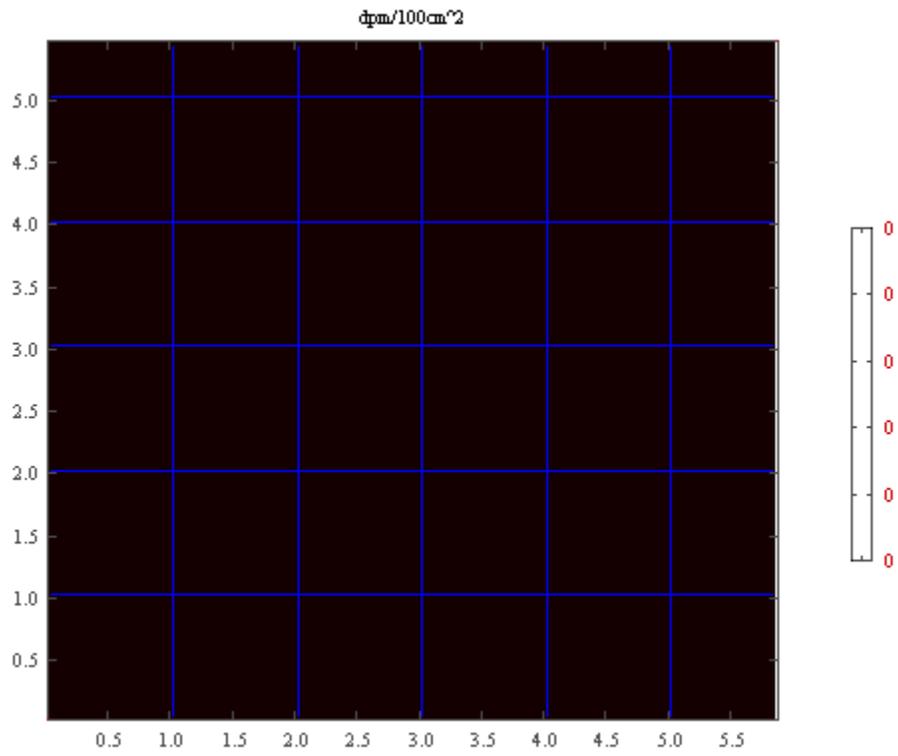


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6031A
Survey Date:	December 10, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

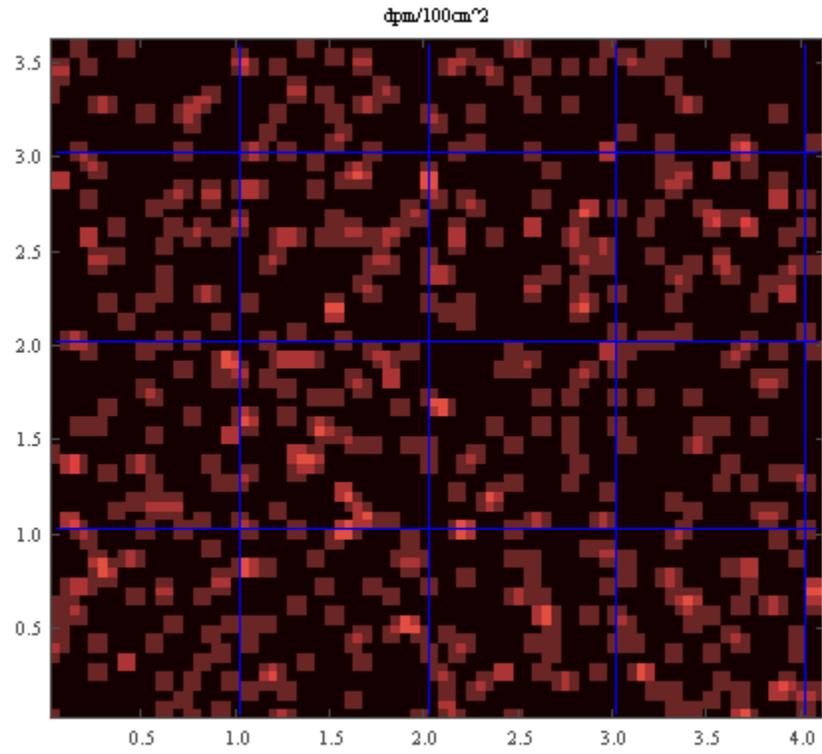


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

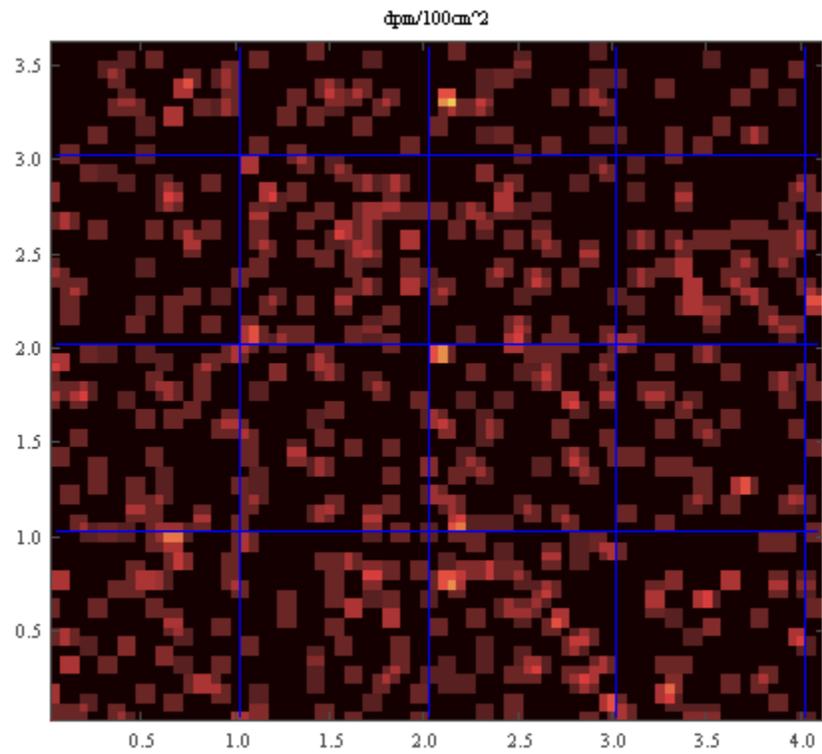


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

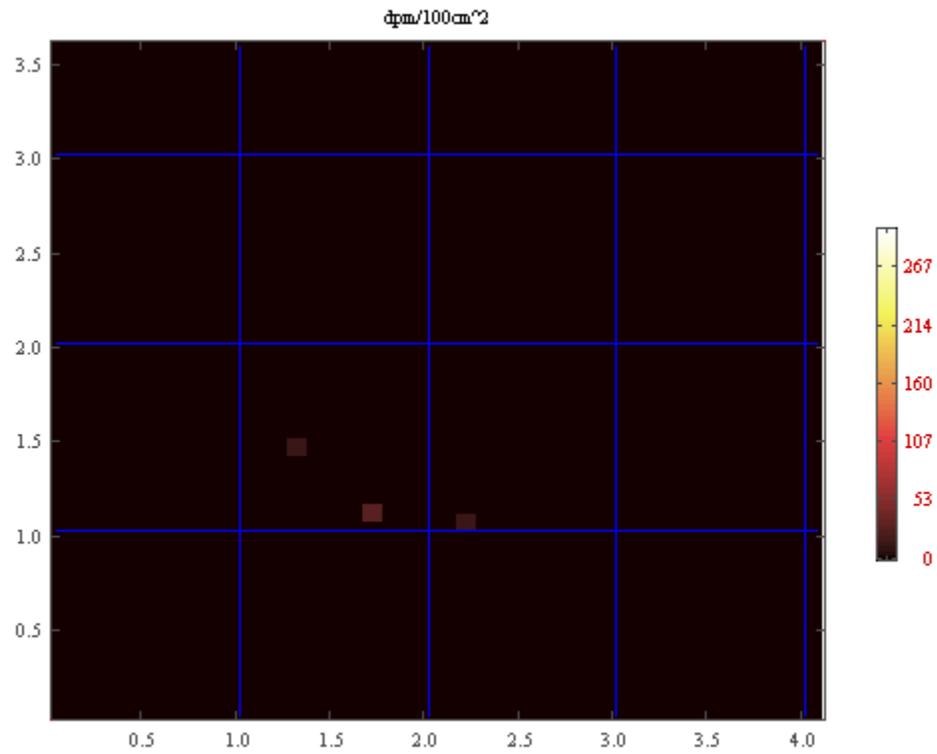


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6221A
Survey Date:	December 16, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

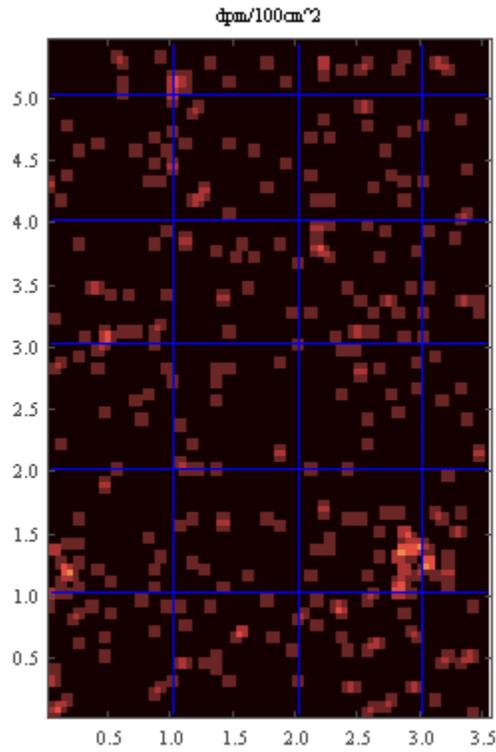


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

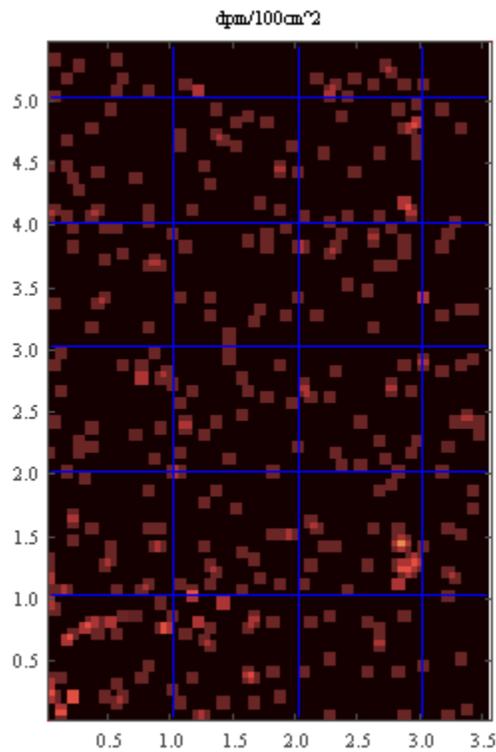


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

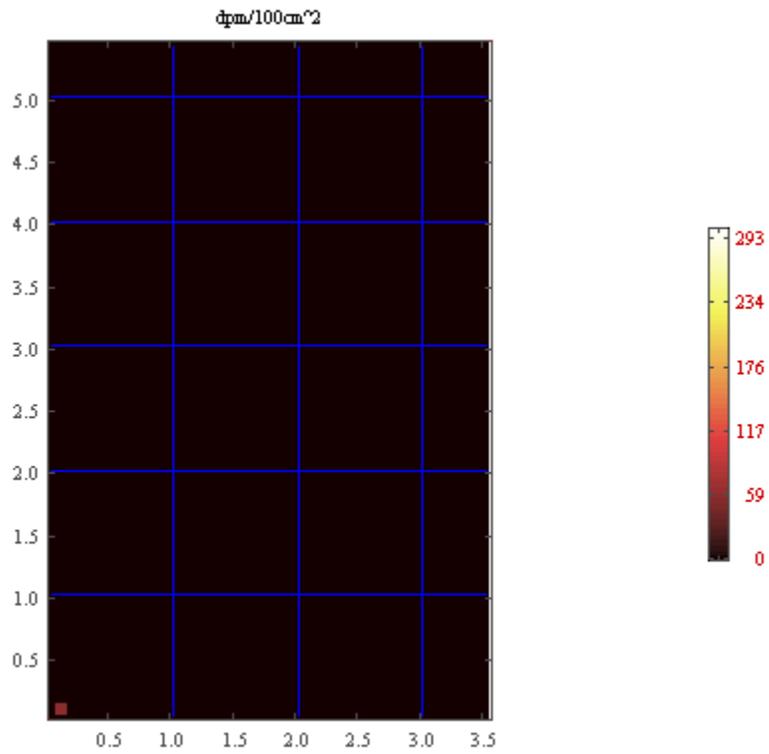


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6231A
Survey Date:	December 17, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

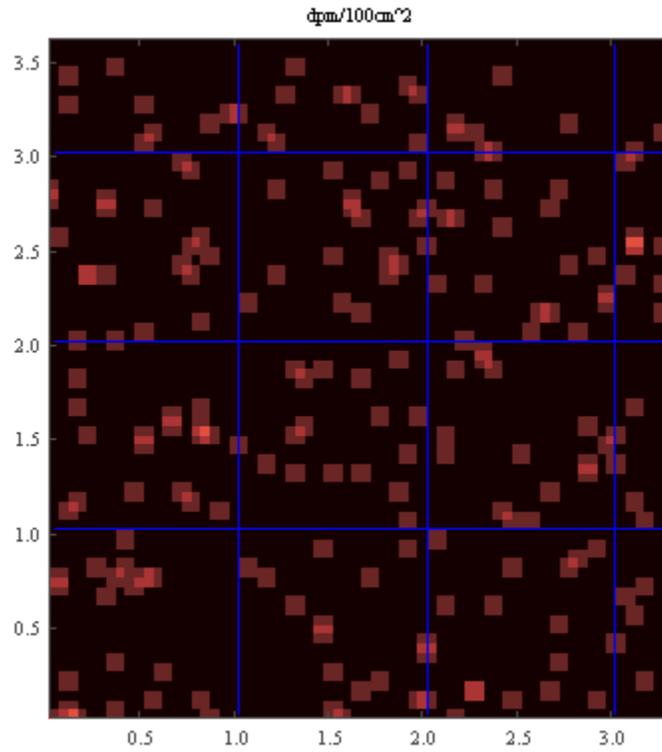


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

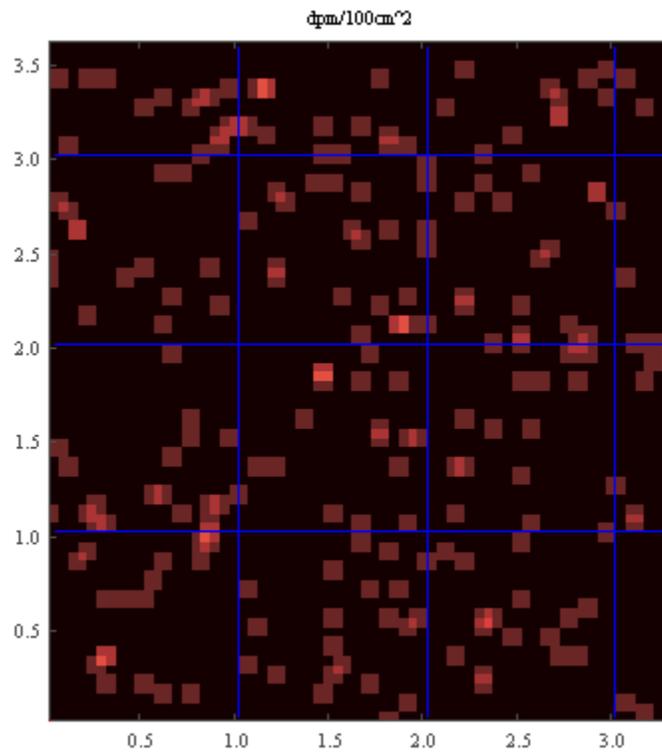


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

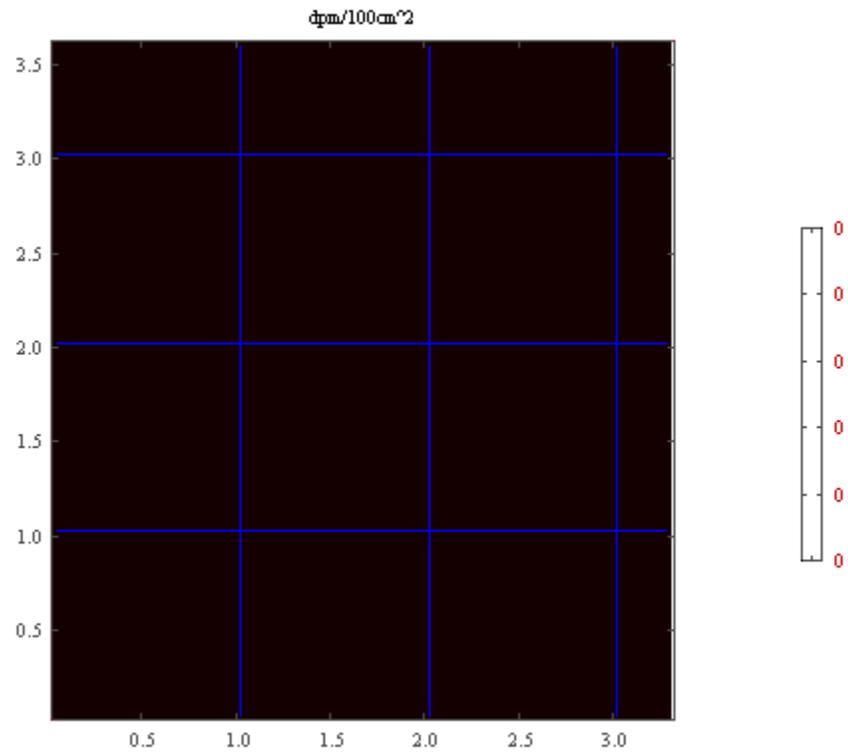


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6321A
Survey Date:	December 17, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

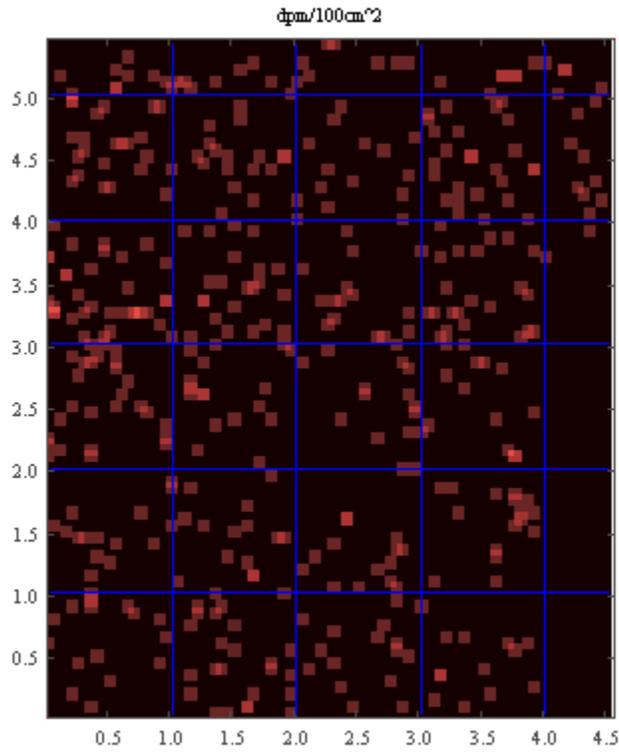


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

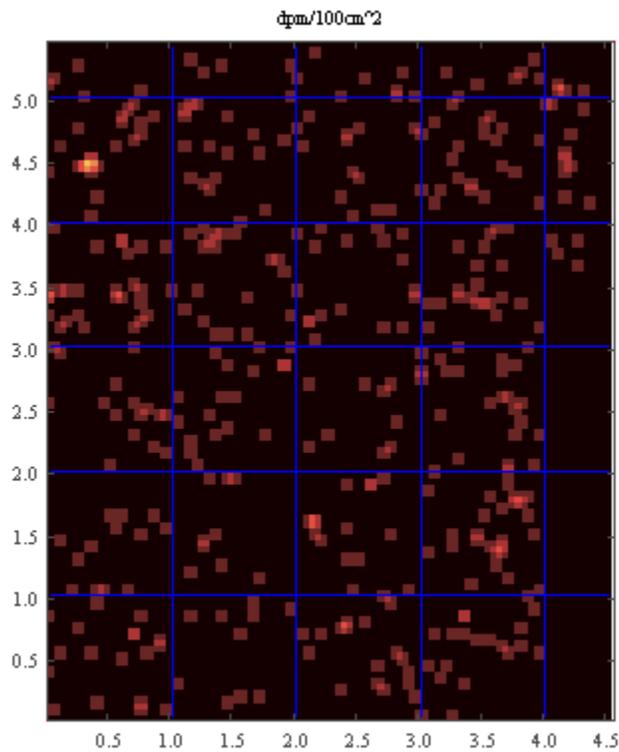


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

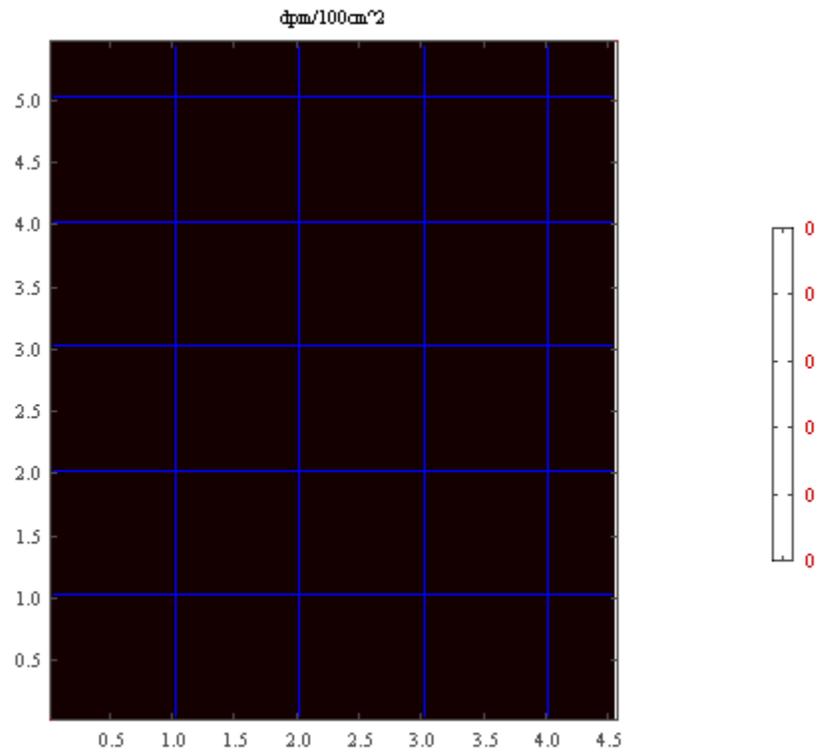


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6321B
Survey Date:	December 21, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

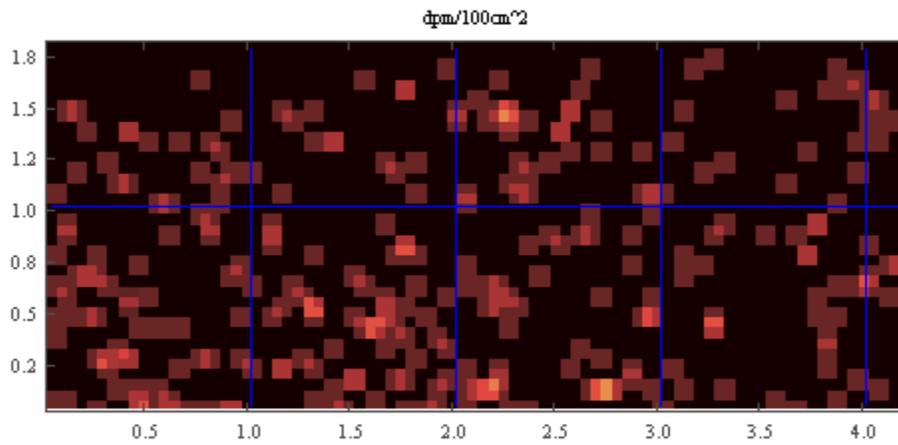


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

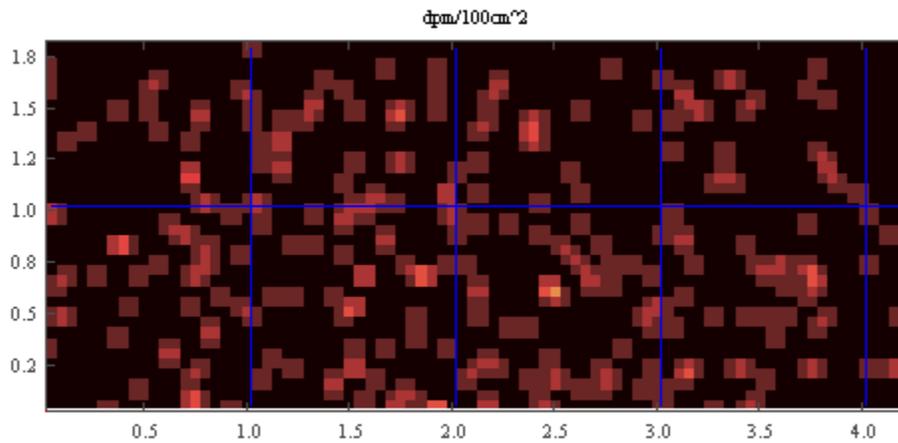


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

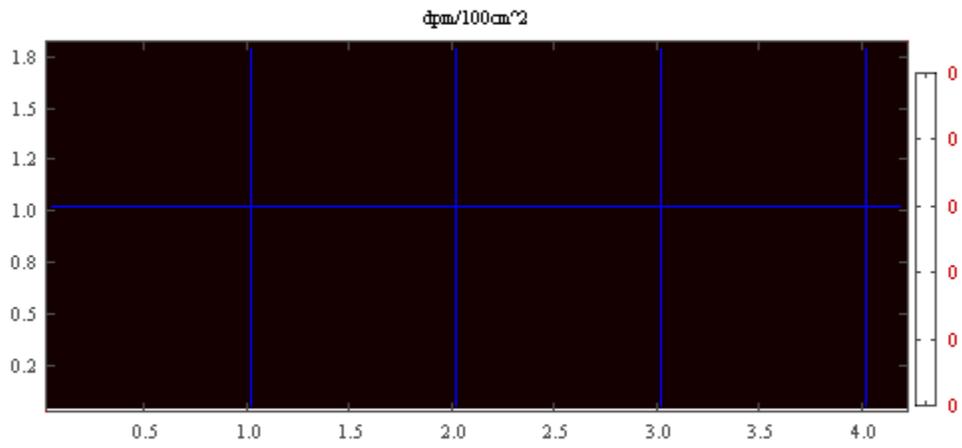


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6331A
Survey Date:	December 17, 2010
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

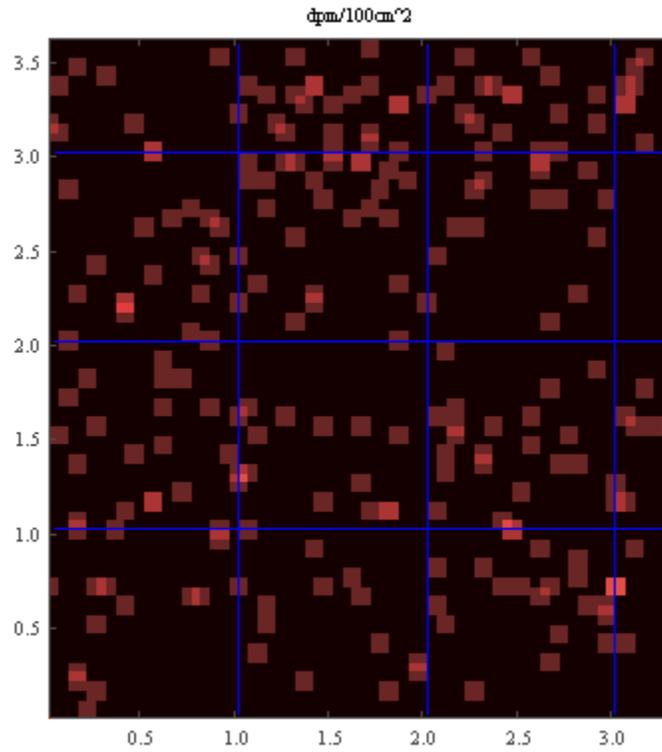


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

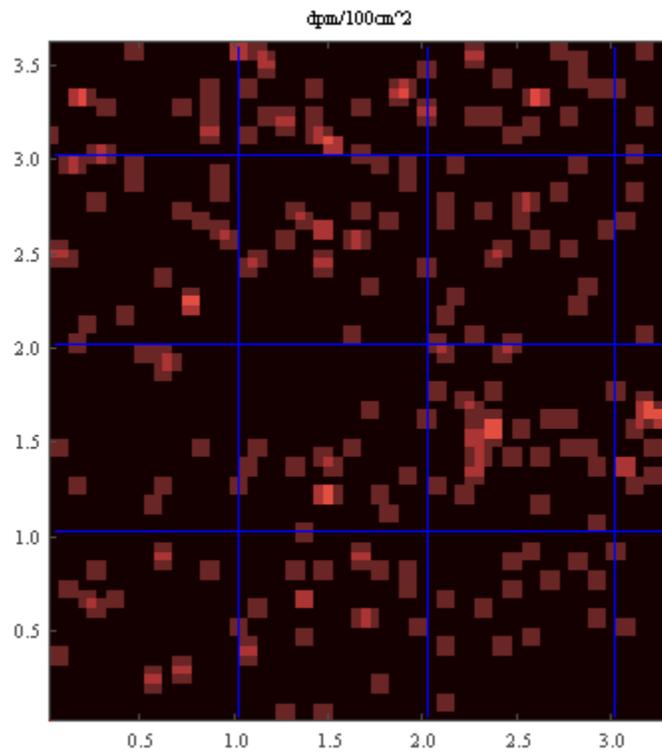


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

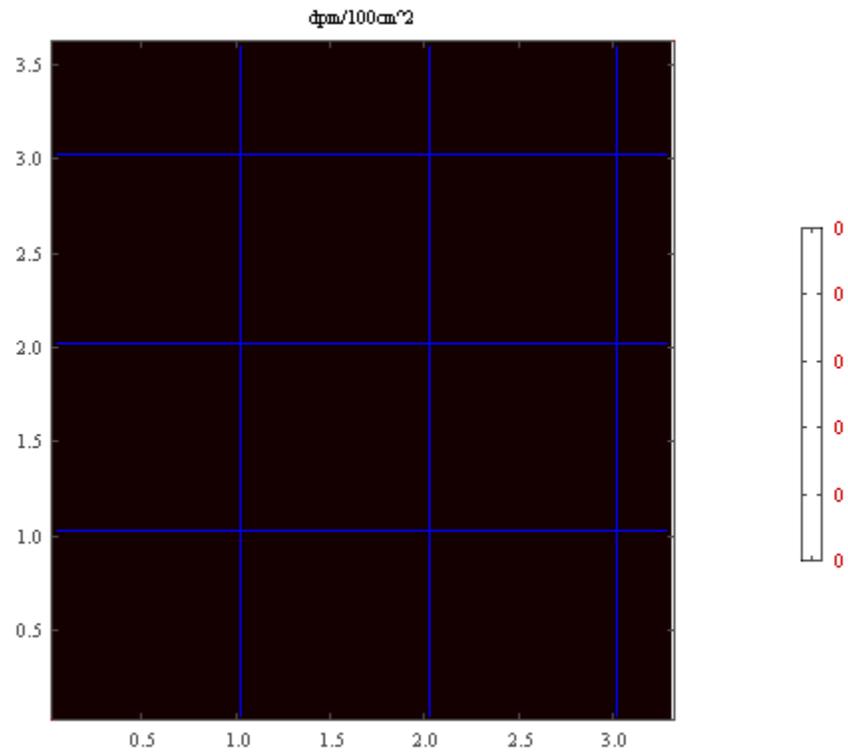


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6411A
Survey Date:	December 7, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

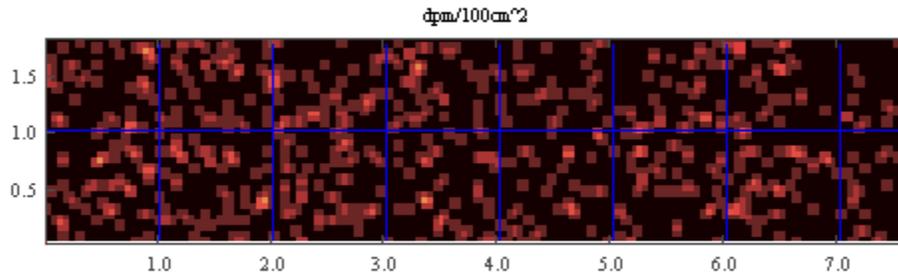


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

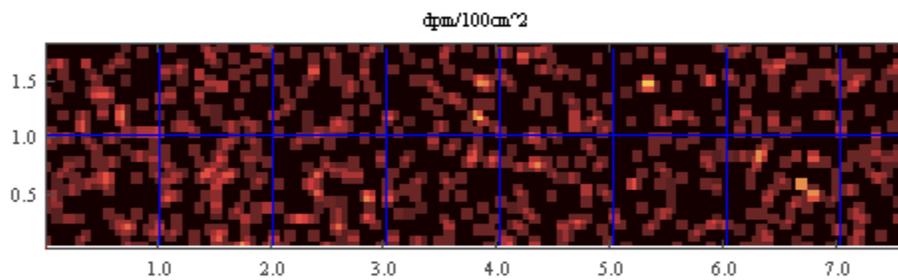


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

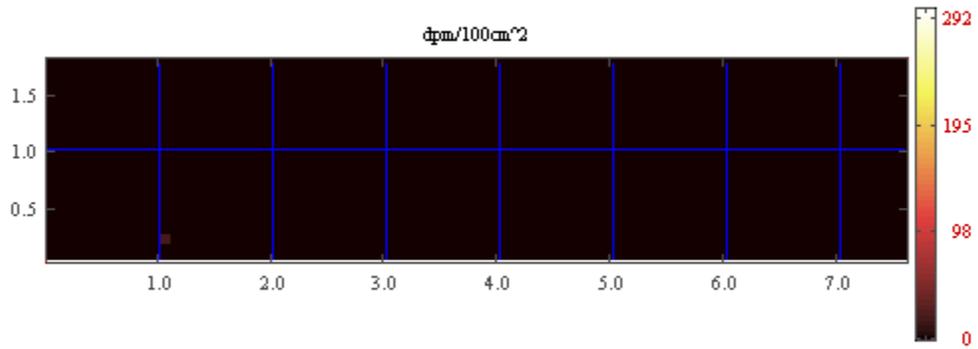


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6511A
Survey Date:	December 7, 2010
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

This survey is not position correlated.

Primary Detector:

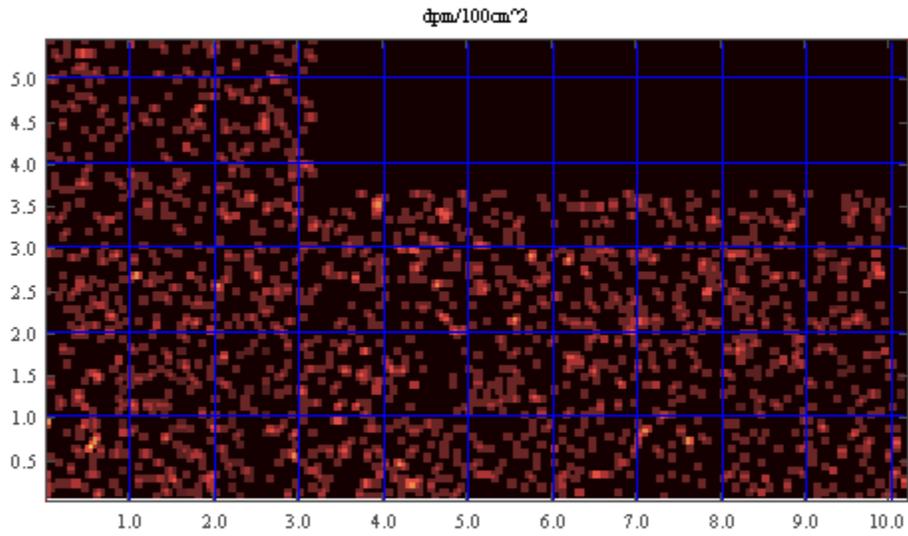


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

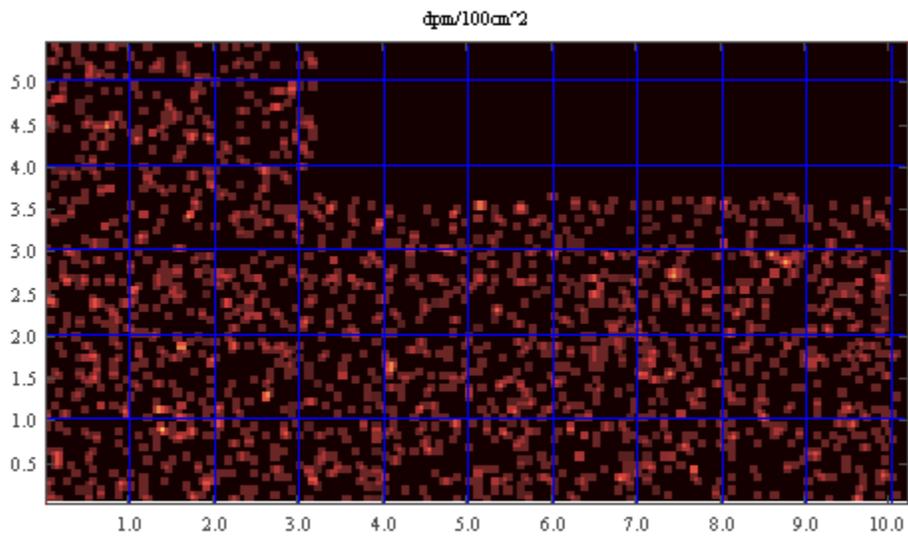


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

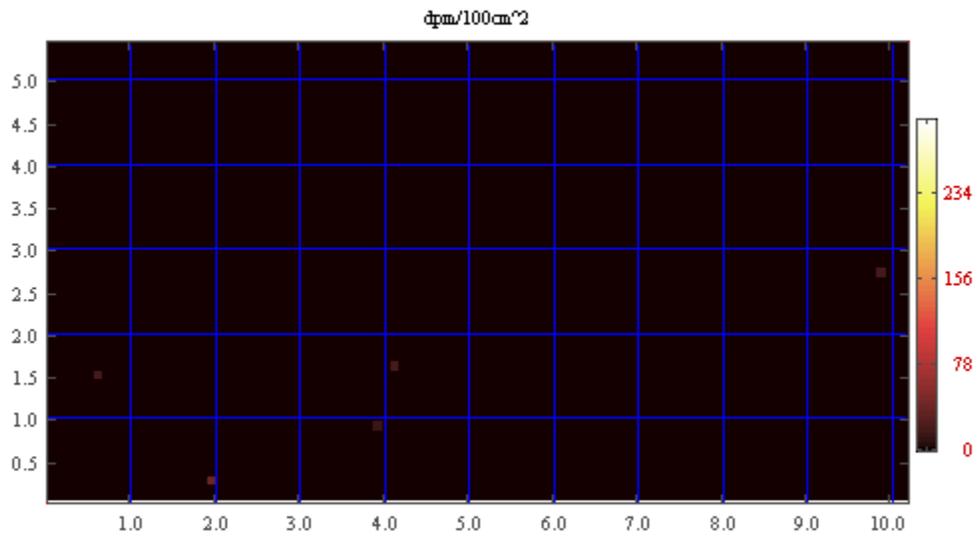


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Survey Report

Survey File Name:	FA6601A
Survey Date:	February 7, 2011
Survey Equipment:	SCM9
Detector(s):	R180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	Below Criteria
Area Exceeding 100 cm² Levels:	0.00 m ²

The lower left corner of all images corresponds to the south west corner of the survey.

Primary Detector:

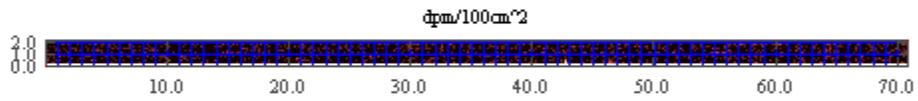


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

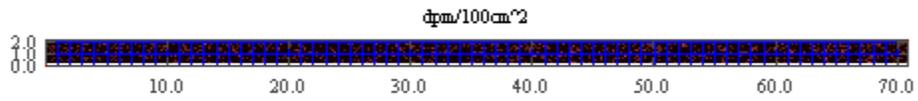


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

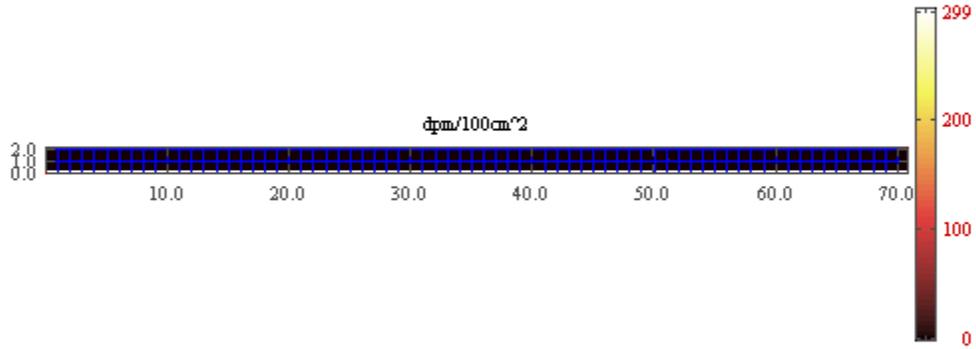


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

APPENDIX G
CONTAMINATION TRACKING LOG (ON CD)

Building 5 Contamination Tracking Log

Area	Activity	Instrument	Type	Removable	Posted RCA	Comments	Photo
SU-1	9.5 cpm	L-2221	α	No	No	Light switch on wall	Yes
SU-2	115	L-2227	α	No	No	Static Measurement location # 18	No
SU-7	8.5 cpm	L-2221	α	No	No	On wall between pipes	Yes
SU-8	9-75 cpm	L-2221	α	No	No	Entire west end of unit. Also the remainder of the unit where no remediation had been performed on the floors 11-40 cpm fixed	No
SU-8	180 cpm	L-2221	α	No	Yes	West wall near south end of area. Numerous areas of contamination found on vertical and horizontal surfaces, including those above 6 feet.	Yes
SU-9	84 cpm	L-2221	α	Yes	Yes	On paint removed from wall	Yes
SU-9	22-183 cpm	L-2221	α	Yes	Yes	North window area 3 spots 12-15 cpm removable	Yes
SU-9	up to 180 cpm	L-2929	α	Yes	Yes	Removable contamination in overhead	Yes
SU-10	Up to 468 cpm	SCM	α	No	Yes	Several spots were identified with the SCM up to 468 cpm in the overhead areas. Surveys with the Ludlum-2221 were not performed on these areas.	Yes
SU-10	153 cpm	L-2929	α	Yes	Yes	Removable contamination inside wall	Yes
SU-10	118 cpm	L-2221	α	No	Yes	Approximately 35 spots in room 118 cpm highest	No
SU-11	28-52 cpm	L-2221	α	No	Yes	3 spots on the west wall	Yes
SU-11	58 cpm 24 cpm	L-2221	α	No	Yes	spots on floor	Yes
SU-12	290 dpm	SCM	α	No	Yes	Multiple spots on Floor	No
SU-13	126 dpm	L-2221	α	No	No	Location 17	No
SU-14	126 dpm	L-2221	α	No	No	Locations 15 and 17	No
SU-16	11-43 cpm	L-2221	α	No	Yes	Several spot on floor in 3 areas	Yes
SU-16	300 cpm α 2307 cpm β	L-2221	α, β	No	Yes	On window vertical support near sill - found with SCM. Measured 300 cpm spot for α	Yes
SU-16	120 cpm	L-2221	α	No	Yes	Spot on wall below window - found with SCM	Yes

Building 5 Contamination Tracking Log

Area	Activity	Instrument	Type	Removable	Posted RCA	Comments	Photo
SU-17	102 cpm	L-2221	α	No	No	Overhead on beams	Yes
SU-17	322 cpm	L-2221	α	No	Yes	Found with SCM on windows	Yes
SU-17	up to 157 cpm	L-2221	α	No	Yes	On floor found with SCM, several locations follow a crack in concrete floor	Yes
SU-20	Up to 383 cpm	SCM	α	No	Yes	Several spots were identified with the SCM up to 383 cpm in the overhead areas. Surveys with the Ludlum-2221 were not performed on these areas.	Yes
SU-20	8-81 cpm	L-2221	α	Yes	Yes	Spot under door location. Spots under over the length that the wall panels were located. Posts in floor which held panels had removable.	Yes
SU-20	22-37	L-2929	α	Yes	Yes	In overhead above hood and on vent duct	No
SU-20	9-12 cpm	L-2221	α	No	Yes	North window sill had 2 locations	Yes
SU-20	40 cpm	L-2221	α	No	Yes	On top of ventilation ducts	Yes
SU-21	Up to 354 cpm (Total), 22-45 cpm (Removable)	SCM, L-2929	α	Yes	Yes	Several spots were identified with the SCM up to 354 cpm in the overhead areas. Surveys with the Ludlum-2221 was not performed on these areas. In overhead on I-beam	Yes
SU-21	34 cpm	L-2929	α	N/A	Yes	Paint chip from window	Yes
SU-21	10-117 cpm	L-2221	α	No	Yes	Several locations along window sill	Yes
SU-22	Up to 351 cpm	SCM	α	No	Yes	One SCM strip identified up to 351 cpm in the overhead areas. Surveys with the Ludlum-2221 were not performed on these areas.	Yes
SU-22	15 cpm	L-2929	α	Yes	Yes	Inside an electrical panel	Yes
SU-22	38 cpm	L-2221	α	Yes	Yes	Inside an electrical panel	Yes
SU-25	300 cpm	L-2221	α	No	Yes	Spot on floor in room SE corner of unit. Found with the SCM.	Yes
SU-26	118 dpm	L-2221	α	No	Yes	Static measurement location # 31	No
SU-30	42 cpm	L-2221	α	No	Yes	On the base of column 13	Yes
SU-33	18.5 cpm	L-2221	α	No	Yes	On top of handrail ^a	Yes
SU-33	298 cpm	L-2221	α	No	Yes	On floor found with SCM	Yes

Building 5 Contamination Tracking Log

Area	Activity	Instrument	Type	Removable	Posted RCA	Comments	Photo
SU-41	up to 30 cpm 37 cpm	L-2221 L-2929	α	Yes	No	In overhead on I-beam	Yes
SU-41	17 cpm	L-2221	α	No	Yes	On window sill	Yes
SU-41	up to 90 cpm	L-2221	α	No	Yes	On floor found with SCM	Yes
SU-43	up to 35 cpm	L-2221	α	No	Yes	On floor. Several other locations were identified with the SCM. ^b	Yes
SU-44	75 cpm	L-2221	α	No	Yes	On horizontal I-beam in overhead	Yes
SU-45	192	SCM	α	No	Yes	2 spots in overhead	No
SU-46	up to 25 cpm	L-2221	α	No	Yes	Found while performing scans not surveyed with SCM	Yes
SU-46	up to 56 cpm	L-2221	α	No	Yes	On floor found with SCM	Yes
SU-47	33 cpm	L-2221	α	No	No	On horizontal I-beam in overhead	Yes
SU-48	up to 360 cpm	L-2221	α	No	Yes	On floor found with SCM 4'x8' area	Yes
SU-49	31.5 cpm	L-2221	α	No	No	On horizontal I-beam in overhead	Yes
SU-50	up to 32 cpm	L-2221	α	No	Yes	On floor found with SCM	Yes
SU-51	15 cpm	L-2221	α	No	Yes	Spot on floor by steam pipes	Yes
SU-52	32 cpm	L-2221	α	No	Yes	On floor found with SCM	Yes
SU-52	up to 59 cpm	L-2221	α	No	Yes	Spot on wall - found with SCM	Yes
SU-53	14-34 cpm	L-2221	α	No	Yes	Spots under sinks highest under the south sink. One additional spot on floor by entrance found with SCM	Yes
SU-54	254	SCM	α	No	Yes	2 spots on Floor	No
SU-56	104 dpm	L-2221	α	No	No	Location # 18	No
SU-57	10-27 cpm	L-2221	α	No	Yes	On northeast side of window sill 5 spots	Yes
SU-58	71-74 cpm	L-2929	α	Yes	No	Overhead on beams	Yes
SU-58	up to 144 cpm	L-2221		Yes	No	Overhead on beams	Yes
SU-58	up to 136 cpm	L-2221	α	No	Yes	On walls steel and glass	Yes
SU-58	568 cpm	L-2221	α	No	Yes	On floor, found with SCM (old computer room area)	Yes
SU-59	up to 44 cpm	L-2221	α	No	Yes	Inside east stack room adjacent to SU3 on floor - CLASS 2 Area	Yes

Building 5 Contamination Tracking Log

Area	Activity	Instrument	Type	Removable	Posted RCA	Comments	Photo
SU-62	105 cpm	L-2221	α	Yes	Yes	Fixed on penetration opening	Yes
SU-62	47-65 cpm (Total), 22-36 cpm (Removable)	L-2221, L-2929	α	Yes	Yes	Two spots on I-beam's. Removable on I-beams and penetration opening	Yes
Roof Vent	11-50 cpm	L-2221	α	No	Yes	Removable on initial smear count but decayed after 2 hours to <MDA. Fixed may be due to radon further investigation is warranted.	No

Notes:

^a This area is under a sprinkler control system. Fixed contamination on the handrail and on the floor with the highest under to front of the handrail. The column next to this area has fixed 9.5cpm. The paint in this area is flaking up and has fixed on the paint chips. Under the sprinkler up to 28cpm, outside of the handrail up to 41.5cpm, under the handrail in front 200-298cpm. This area appears to be under SU57.

^b The area of contamination is on an elevated section of the floor (1/2") approximately 9'x20' and an adjacent area also raised approximately 2'x4'

α Alpha

β Beta

cpm Counts per minute

dpm Disintegrations per minute

L-2221 Ludlum Model 2221 scaler/ratemeter

L-2929 Ludlum Model 2929 alpha/beta scaler

MDA Minimum Detectable Activity

N/A Not applicable

RCA Radiologically Controlled Area

SCM Surface Contamination Monitor

SU Survey Unit



SU-1

Activity: 9.5 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: No

Comments: Light switch on wall



SU-7

Activity: 8.5 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: No

Comments: On wall between pipes



SU-8

Activity: 180 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: West wall near south end of area. Numerous areas of contamination found on vertical and horizontal surfaces, including those above 6 feet.



SU-9

Activity: 84 cpm

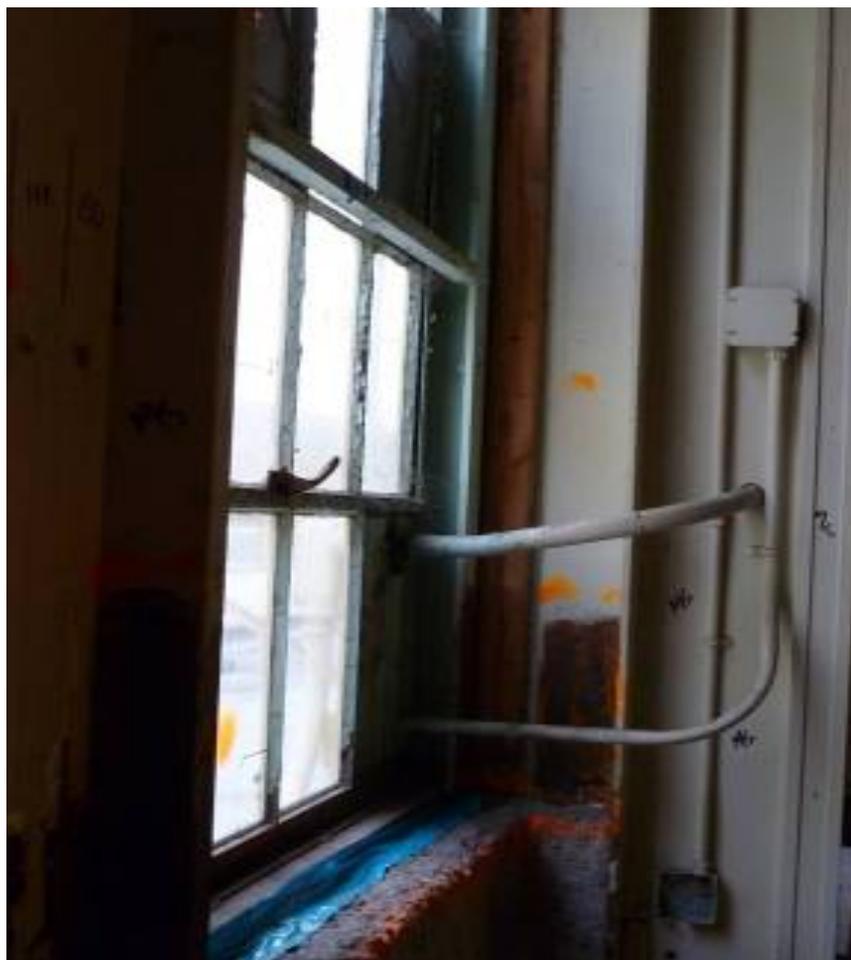
Instrument: L-2221

Type: α

Removable: Yes

Posted RCA: Yes

Comments: On paint removed from wall



SU-9

Activity: 22-183 cpm

Instrument: L-2221

Type: α

Removable: Yes

Posted RCA: Yes

Comments: North window area 3 spots 12-15 cpm removable



SU-9

Activity: Up to 180 cpm

Instrument: L-2929

Type: α

Removable: Yes

Posted RCA: Yes

Comments: Removable contamination in overhead



SU-10

Activity: Up to 468 cpm

Instrument: SCM

Type: α

Removable: No

Posted RCA: Yes

Comments: Several spots were identified with the SCM up to 468 cpm in the overhead areas. Surveys with the Ludlum-2221 were not performed on these areas.



SU-10

Activity: 153 cpm

Instrument: L-2929

Type: α

Removable: Yes

Posted RCA: Yes

Comments: Removable contamination inside wall



SU-11

Activity: 28-52 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: 3 spots on the west wall. Door has been disposed of as rad waste.



SU-11

Activity: 58 cpm, 24 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Spots on floor. Door has been disposed of as rad waste.



SU-16

Activity: 11-43 cpm

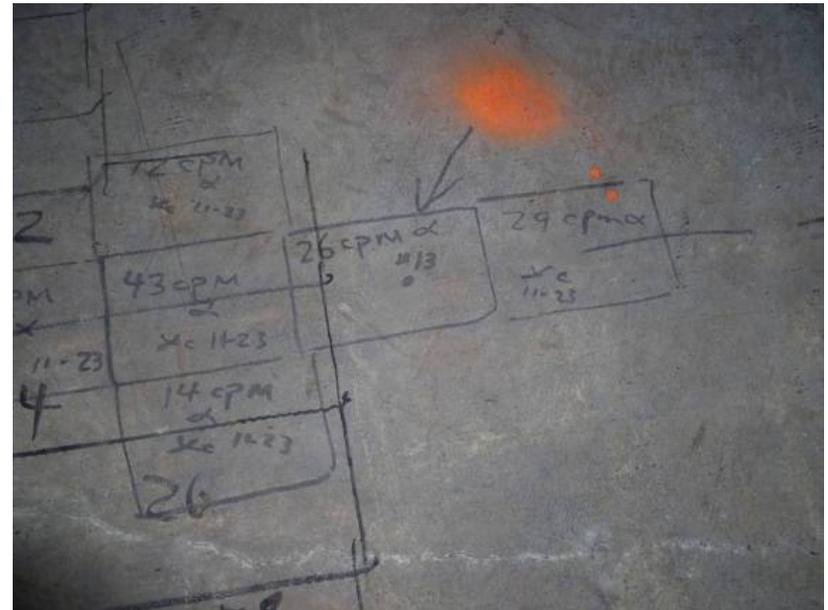
Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Several spot on floor in 3 areas





SU-16

Activity: 300 cpm α , 2307 cpm β

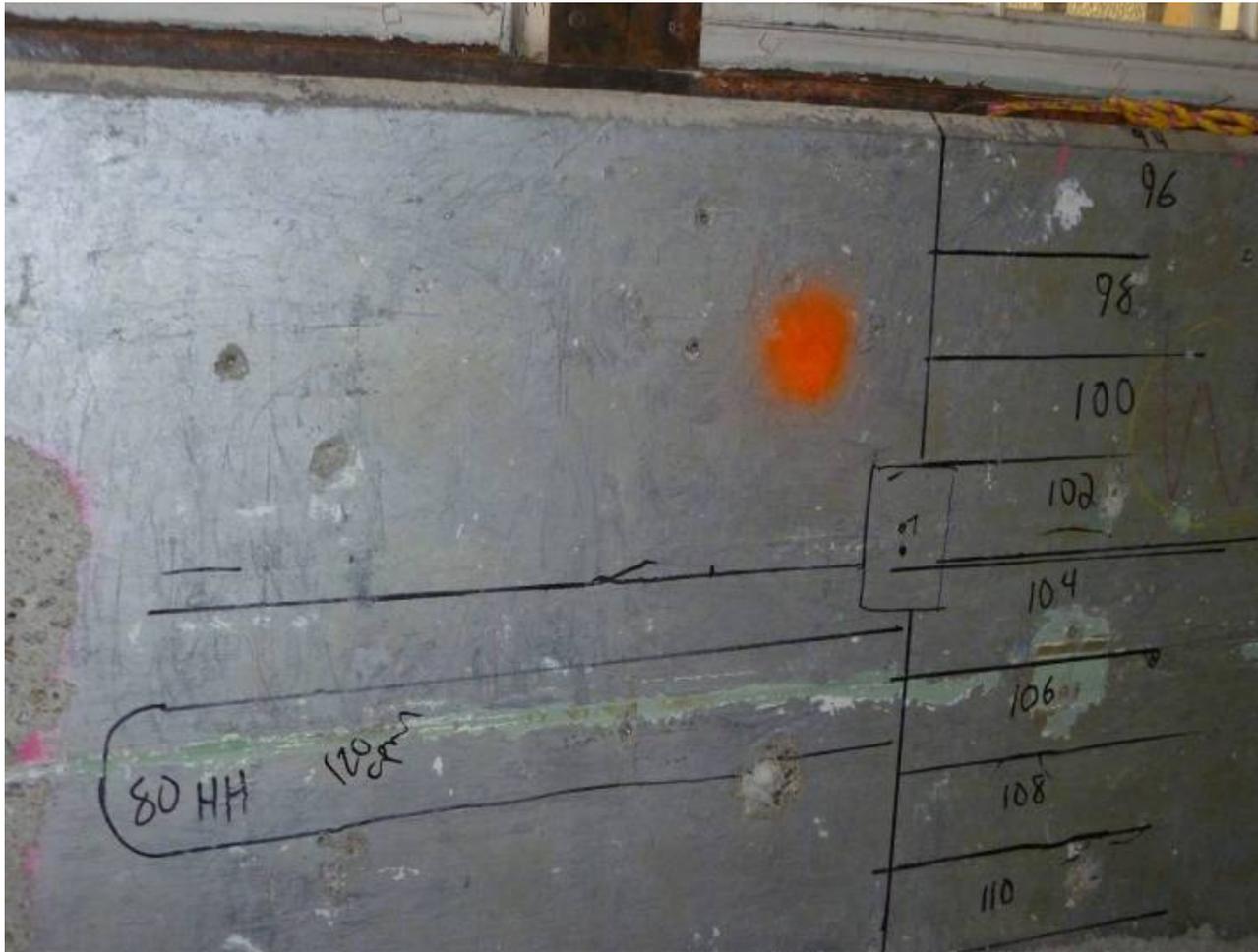
Instrument: L-2221

Type: α , β

Removable: No

Posted RCA: Yes

Comments: On window vertical support near sill - found with SCM. Measured 300 cpm spot for α



SU-16

Activity: 120 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Spot on wall below window - found with SCM



SU-17

Activity: 102 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: No

Comments: Overhead on beams



SU-17

Activity: 322 cpm

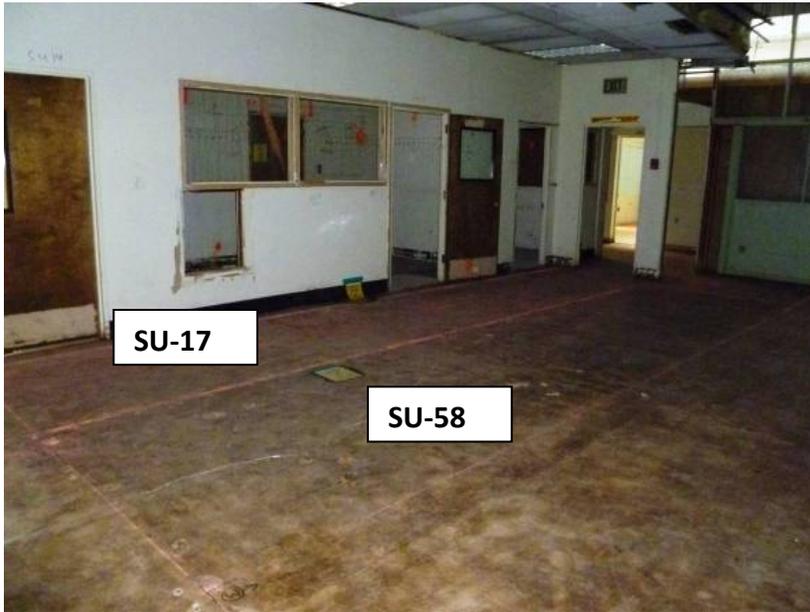
Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Found with SCM on windows



SU-17

Activity: Up to 157 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor found with SCM, several locations follow a crack in concrete floor





SU-20

Activity: Up to 383 cpm

Instrument: SCM

Type: α

Removable: No

Posted RCA: Yes

Comments: Several spots were identified with the SCM up to 383 cpm in the overhead areas. Surveys with the Ludlum-2221 were not performed on these areas.





SU-20

Activity: 8-81 cpm

Instrument: L-2221, L-2929

Type: α

Removable: Yes

Posted RCA: Yes

Comments: Spot under door location. Spots under over the length that the wall panels were located. Posts in floor which held panels had removable.



SU-20

Activity: 9-12 cpm

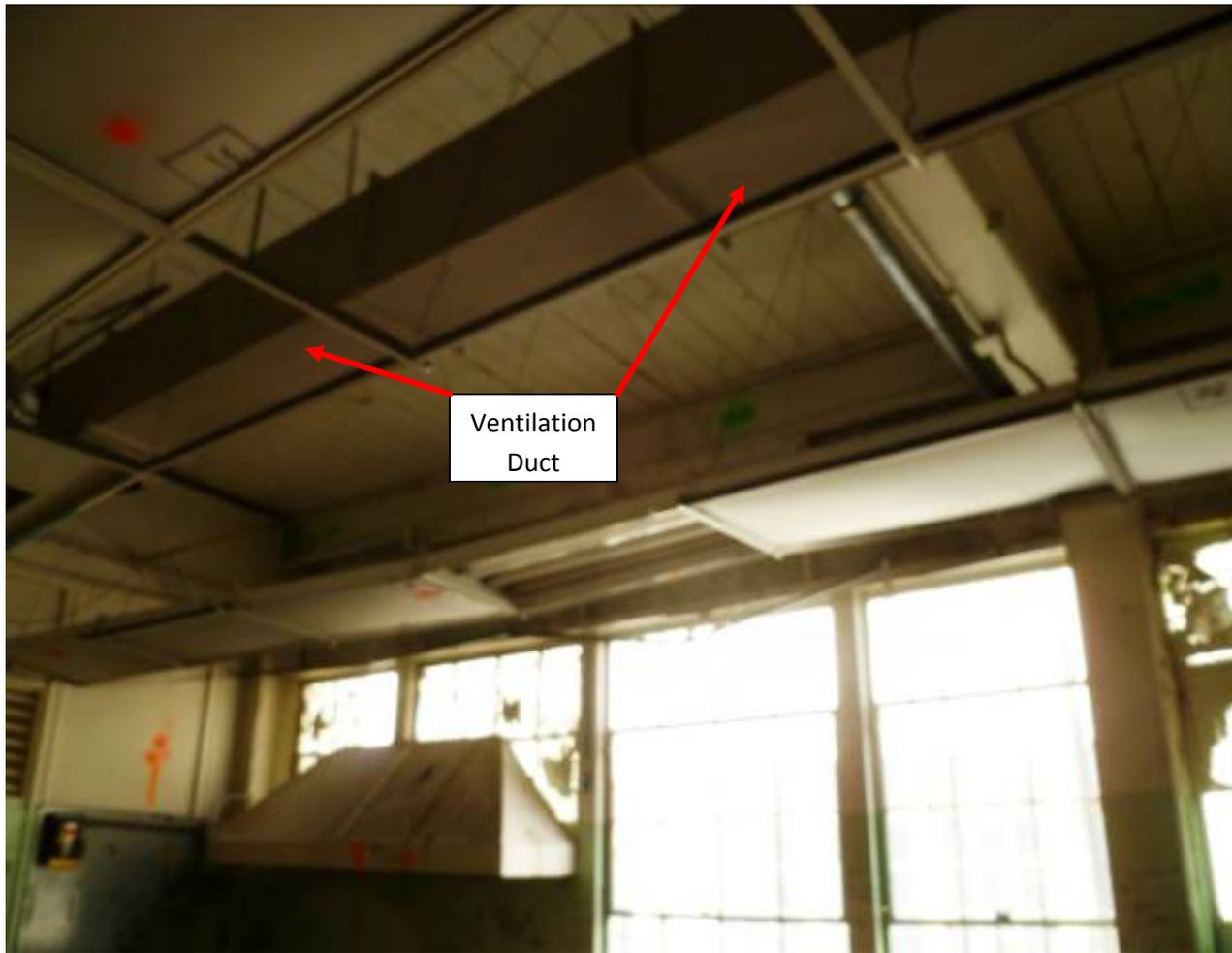
Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: North window sill had 2 locations



SU-20

Activity: 40 cpm

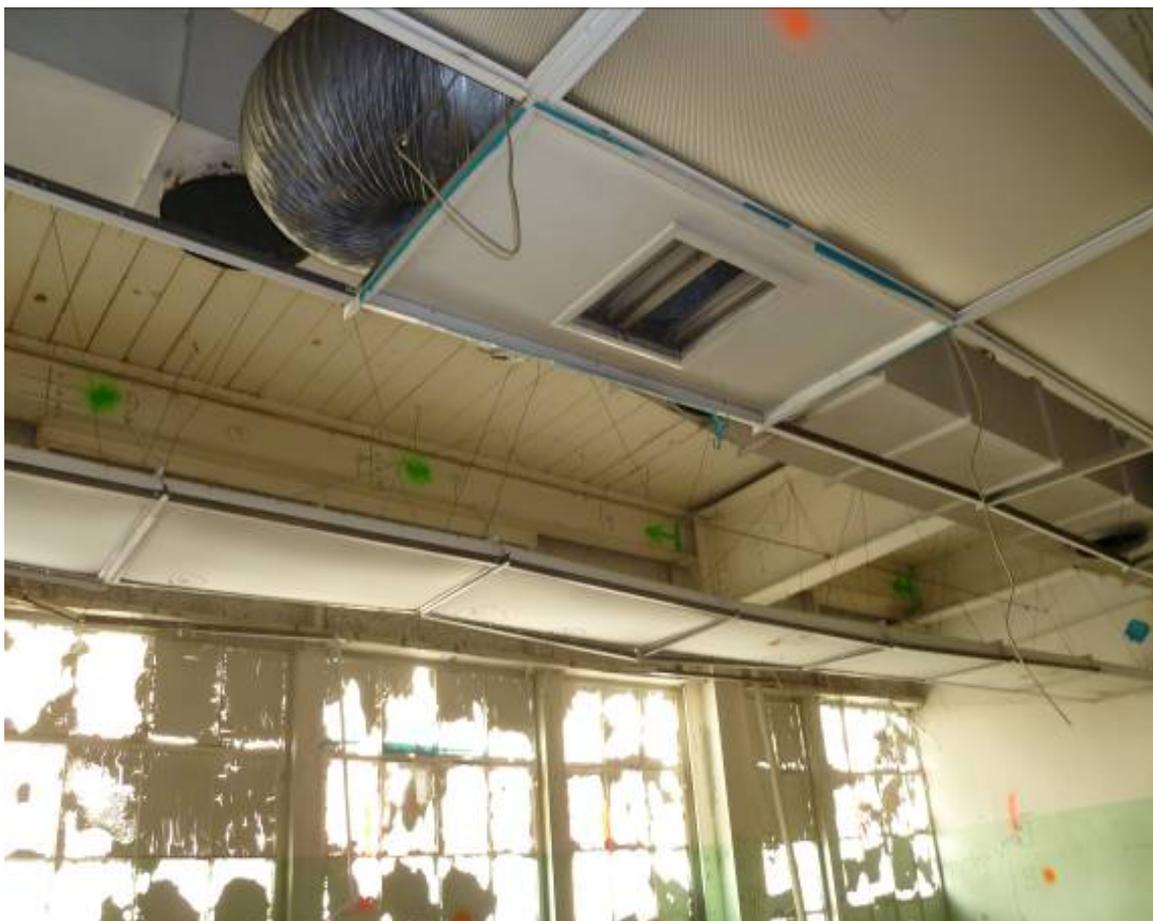
Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On top of ventilation ducts



SU-21

Activity: Up to 354 cpm (Total), 22-45 cpm (Removable)

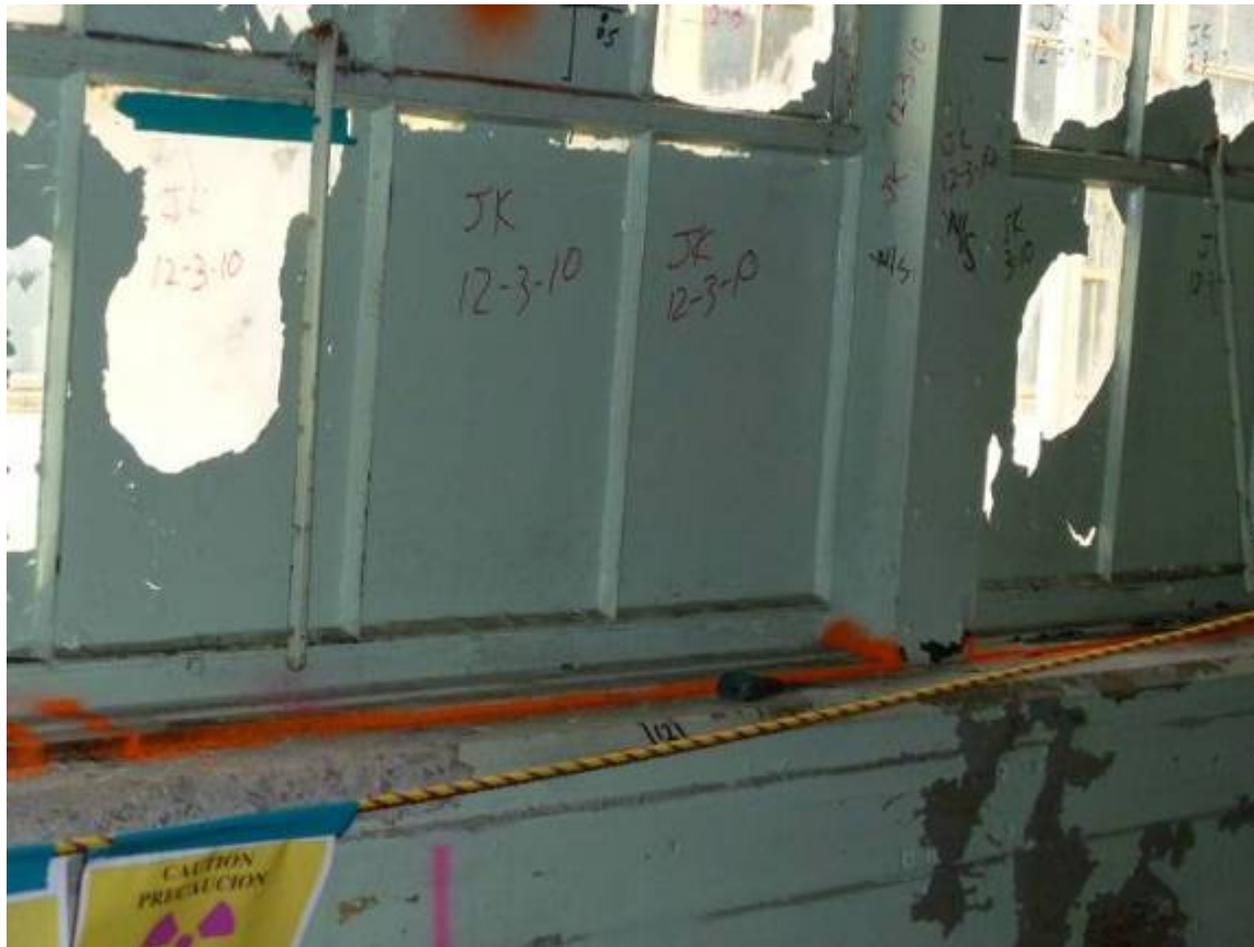
Instrument: SCM, L-2929

Type: α

Removable: Yes

Posted RCA: Yes

Comments: Several spots were identified with the SCM up to 354 cpm in the overhead areas. Surveys with the Ludlum-2221 was not performed on these areas. Removable in overhead on I-beam.



SU-21

Activity: 34 cpm

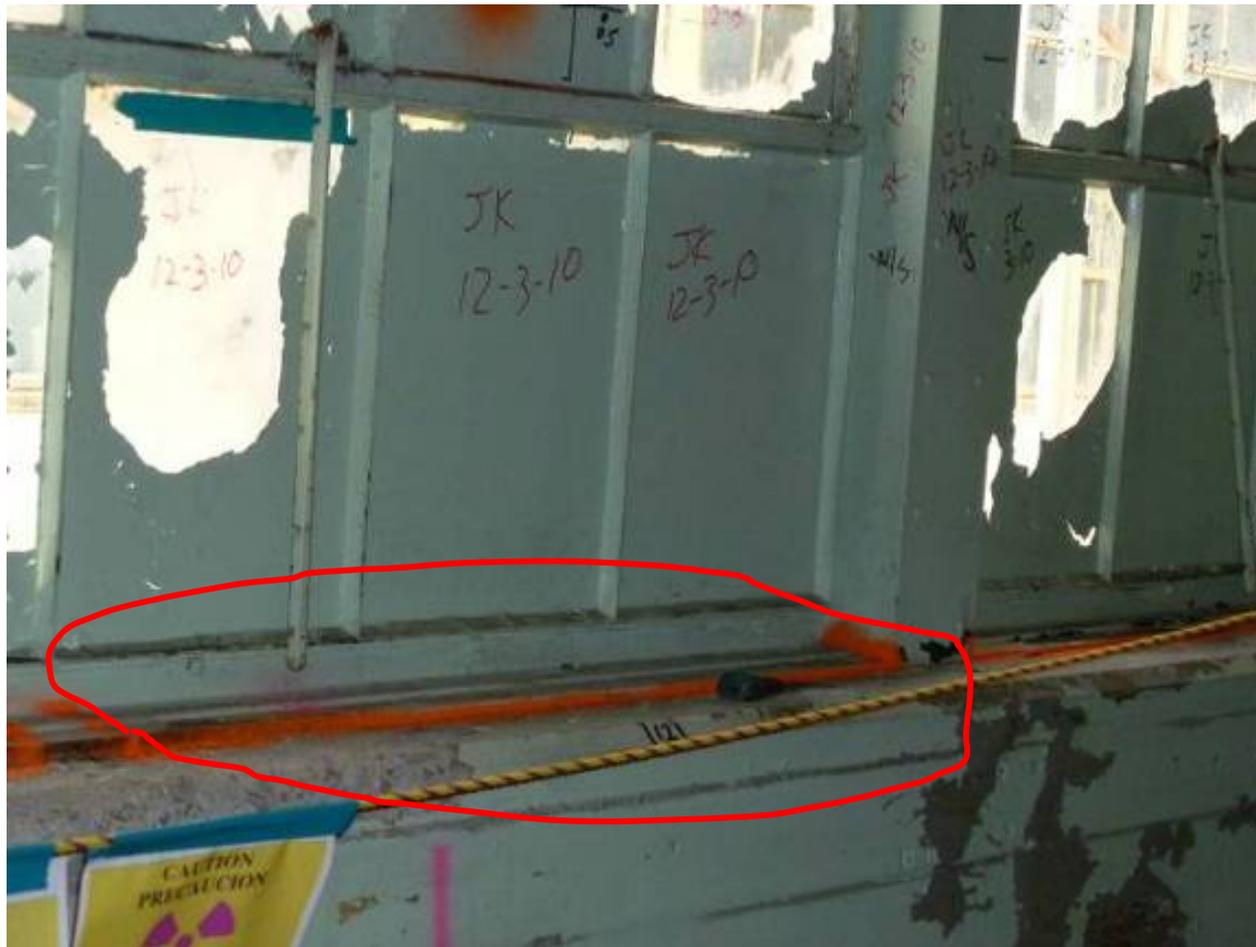
Instrument: L-2929

Type: α

Removable: N/A

Posted RCA: Yes

Comments: Paint chip from window



SU-21

Activity: 10-117 cpm

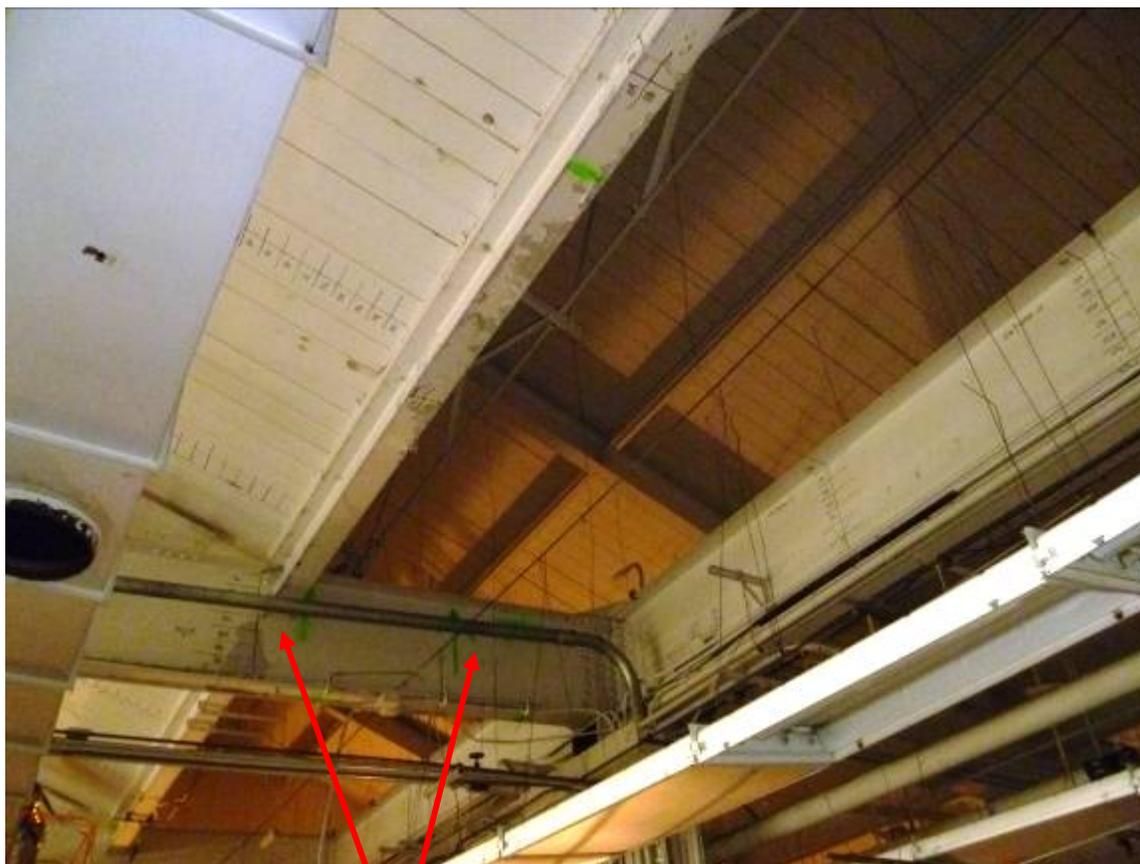
Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Several locations along window sill



Strip Area

SU-22

Activity: Up to 351 cpm

Instrument: SCM

Type: α

Removable: No

Posted RCA: Yes

Comments: One SCM strip identified up to 351 cpm in the overhead areas. Surveys with the Ludlum-2221 were not performed on these areas.



SU-22

Activity: 15 cpm

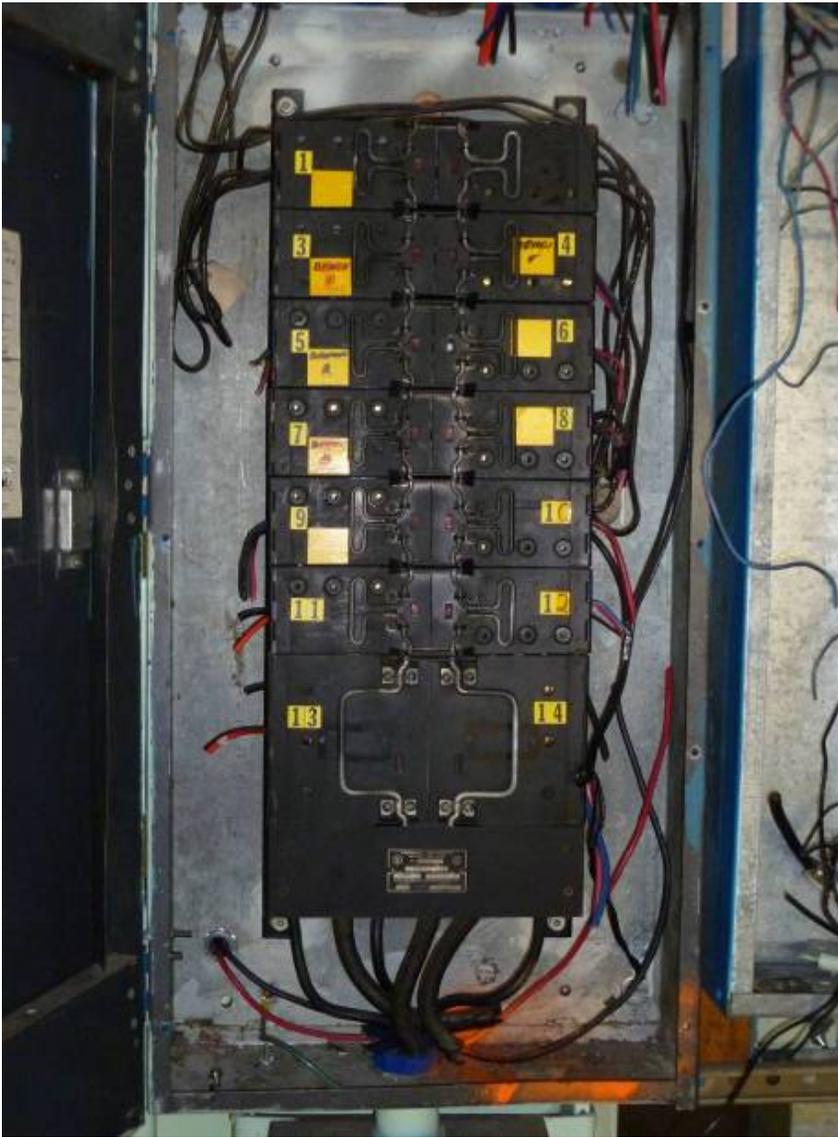
Instrument: L-2929

Type: α

Removable: Yes

Posted RCA: Yes

Comments: Inside an electrical panel



SU-22

Activity: 38 cpm

Instrument: L-2221

Type: α

Removable: Yes

Posted RCA: Yes

Comments: Inside an electrical panel



SU-25

Activity: 300 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Spot on floor in room SE corner of unit. Found with the SCM.



SU-30

Activity: 42 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On the base of column 13



SU-33

Activity: 18.5 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On top of handrail

G-33



SU-33

Activity: 298 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor found with SCM



SU-41

Activity: Up to 30 cpm (Total), 37 cpm (Removable)

Instrument: L-2221, L-2929

Type: α

Removable: Yes

Posted RCA: No

Comments: In overhead on I-beam





SU-41

Activity: 17 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On window sill



SU-41

Activity: Up to 90 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor found with SCM



SU-43

Activity: Up to 35 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor. Several other locations were identified with the SCM



SU-44

Activity: 75 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On horizontal I-beam in overhead



SU-46

Activity: Up to 25 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Found while performing scans not surveyed with SCM



SU-46

Activity: Up to 56 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor found with SCM



SU-47

Activity: 33 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: No

Comments: On horizontal I-beam in overhead



SU-48

Activity: Up to 360 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor found with SCM 4'x8' area



G-43



SU-49

Activity: 31.5 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: No

Comments: On horizontal I-beam in overhead.



SU-50

Activity: Up to 32 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor found with SCM



G-45



SU-51

Activity: 15 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Spot on floor by steam pipes



SU-52

Activity: 32 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor found with SCM



SU-52

Activity: Up to 59 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Spot on wall - found with SCM



SU-53

Activity: 14-34 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Spots under sinks highest under the south sink. One additional spot on floor by entrance found with SCM.



SU-57

Activity: 10-27 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On northeast side of window sill 5 spots



SU-58

Activity: Up to 144 cpm (Total), 71-74 cpm (Removable)

Instrument: L-2929

Type: α

Removable: Yes

Posted RCA: No

Comments: Overhead on beams





SU-58

Activity: Up to 136 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On walls steel and glass



SU-58

Activity: 568 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: On floor, found with SCM (old computer room area)

G-53



SU-59

Activity: Up to 44 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Inside east stack room adjacent to SU-3 on floor - CLASS 2 Area



SU-62

Activity: 105 cpm

Instrument: L-2221

Type: α

Removable: No

Posted RCA: Yes

Comments: Fixed on penetration opening



SU-62

Activity: 47-65 cpm (Total), 22-36 dpm (Removable)

Instrument: L-2221, L-2929

Type: α

Removable: No

Posted RCA: Yes

Comments: Two spots on I-beam's. Removable on I-beams and penetration opening

APPENDIX H
SMEAR AND GAMMA SURVEY RESULTS (ON CD)

SU 1 Floors Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	2	85
2	6	0	124
3	6	0	93
4	6	0	109
5	6	0	98
6	6	0	80
7	5	0	100
8	5	0	102
9	6	0	113
10	6	0	83
11	7	0	87
12	6	0	130
13	5	0	85
14	6	0	72
15	6	0	122
16	7	0	85
17	6	0	109

SU 1 Walls Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	0	111
19	6	0	128
20	5	0	98
21	5	0	93
22	6	0	96
23	6	0	102
24	7	0	72
25	7	0	122
26	6	0	113
27	6	0	91
28	6	0	98
29	6	0	98
30	6	0	128
31	7	0	126
32	7	0	98
33	6	0	122
34	6	0	89

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 1 Overheads Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	5	0	83
36	5	2	122
37	6	0	80
38	6	0	93
39	5	2	72
40	5	2	104
41	6	0	122
42	5	0	89
43	5	2	93
44	5	0	100
45	5	0	96
46	5	0	100
47	5	0	104
48	6	0	83
49	6	0	109
50	5	0	89
51	5	2	67

SU 2 Floors Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	0	91
19	6	0	96
20	6	5	107
21	7	0	100
22	7	2	85
23	7	0	100
24	6	0	100
25	6	0	113
26	6	0	124
27	6	0	80
28	6	2	98
29	7	0	133
30	7	0	102
31	7	0	111
32	6	0	109
33	7	0	96
34	6	0	104

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 2 Walls Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	91
2	6	0	107
3	6	0	98
4	6	0	102
5	6	0	93
6	6	0	91
7	6	2	91
8	6	0	91
9	7	0	124
10	7	0	117
11	6	0	102
12	7	2	85
13	7	0	122
14	7	0	109
15	6	0	102
16	6	0	120
17	7	2	124

SU 2 Overheads Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	6	0	76
36	7	0	91
37	7	0	80
38	5	0	102
39	6	0	100
40	6	0	115
41	7	0	100
42	6	0	102
43	6	0	117
44	7	0	107
45	6	0	91
46	6	2	87
47	5	0	96
48	6	0	78
49	7	0	83
50	6	0	96
51	6	0	111

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 3 Floors/ Walls Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	40
2	7	1	42
3	7	0	27
4	8	0	39
5	8	0	50
6	9	1	45
7	9	0	46
8	7	0	43
9	7	0	44
10	7	1	51
11	7	0	44
12	7	0	44
13	7	0	48
14	7	0	57
15	8	0	43
16	8	0	37
17	9	0	48

SU 3 Overheads Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	7	0	43
19	7	1	53
20	7	0	39
21	8	0	47
22	7	1	52
23	9	0	46
24	8	0	41
25	8	0	44
26	9	0	54
27	8	0	44
28	8	0	43
29	7	0	44
30	7	0	40
31	8	1	55
32	7	0	58
33	7	0	42
34	7	0	32

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 4 Walls Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	113
2	6	2	117
3	6	0	96
4	6	0	93
5	6	2	111
6	6	0	117
7	6	0	98
8	6	0	104
9	6	2	115
10	6	0	70
11	7	0	74
12	7	0	93
13	7	0	87
14	6	2	115
15	7	0	115
16	7	0	83
17	7	0	104

SU 4 Floors Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	0	76
19	7	0	104
20	7	0	85
21	6	0	72
22	6	0	89
23	6	0	124
24	6	0	72
25	7	0	85
26	6	0	104
27	6	0	96
28	6	0	100
29	7	0	102
30	7	0	87
31	6	0	126
32	6	0	76
33	7	0	98
34	7	0	74

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 4 Overheads Location	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	6	0	85
36	6	0	117
37	6	0	124
38	6	0	89
39	6	0	104
40	5	0	89
41	5	0	102
42	6	0	70
43	6	2	85
44	6	0	96
45	6	0	102
46	6	0	100
47	6	2	98
48	6	0	117
49	5	0	76
50	5	0	109
51	5	0	96

SU 5 Walls < 6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	104
2	6	0	124
3	7	2	107
4	6	0	107
5	5	0	72
6	6	0	124
7	7	0	128
8	8	2	91
9	9	0	74
10	9	0	78
11	8	0	102
12	7	0	104
13	7	0	102
14	7	0	109
15	6	0	102
16	6	0	72
17	6	0	117

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 5 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	0	87
19	6	0	85
20	6	0	102
21	6	0	76
22	6	0	111
23	8	0	85
24	7	0	80
25	7	0	91
26	7	0	91
27	7	0	96
28	8	2	111
29	7	0	113
30	7	0	102
31	7	2	109
32	7	0	83
33	7	0	93
34	8	2	107

SU 5 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	6	0	102
36	5	2	109
37	6	7	80
38	6	2	93
39	6	0	100
40	7	0	115
41	8	0	87
42	8	0	124
43	6	0	78
44	6	2	93
45	6	0	89
46	6	0	80
47	6	0	98
48	6	0	91
49	8	0	102
50	6	0	102
51	6	0	93
52	6	0	130

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 6 Walls < 6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	107
2	6	0	102
3	7	0	107
4	7	0	126
5	7	0	139
6	7	0	124
7	7	0	83
8	6	0	107
9	6	0	107
10	6	0	113
11	6	0	80
12	6	0	109
13	6	0	111
14	7	0	104
15	7	0	113
16	6	0	115
17	7	0	120

SU 6 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	7	0	107
19	6	2	96
20	6	0	63
21	6	0	100
22	6	5	109
23	5	0	80
24	5	2	74
25	6	0	63
26	6	2	76
27	7	0	135
28	7	0	67
29	6	0	120
30	6	0	98
31	6	2	98
32	6	0	102
33	6	0	122
34	6	2	107

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 7 Floors/Walls < 6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	102
2	7	0	83
3	7	0	120
4	7	0	104
5	10	0	93
6	10	0	78
7	8	0	109
8	7	0	152
9	7	0	89
10	7	2	102
11	7	2	89
12	7	0	93
13	7	2	107
14	10	0	98
15	7	2	87
16	7	2	109
17	8	0	78

SU 7 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	7	2	89
19	6	0	109
20	7	2	100
21	7	2	94
22	9	0	80
23	8	0	85
24	8	0	87
25	7	7	102
26	7	0	102
27	6	5	91
28	6	2	109
29	6	5	104
30	6	5	111
31	6	2	87
32	6	2	89
33	9	0	91
34	8	0	109

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 8 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	10	0	107
2	10	2	76
3	10	0	120
4	10	0	83
5	10	0	70
6	9	0	141
7	10	0	96
8	10	0	109
9	10	0	107
10	9	2	113
11	10	0	76
12	10	0	104
13	10	0	91
14	9	0	83
15	10	0	76
16	10	0	113
17	10	2	111

SU 8 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	9	0	109
19	10	2	120
20	10	0	80
21	9	0	96
22	9	0	111
23	8	0	78
24	7	0	93
25	7	2	113
26	7	0	70
27	8	0	87
28	11	0	113
29	10	0	104
30	12	0	85
31	9	0	96
32	10	0	102
33	8	0	83
34	9	0	85

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 9 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	10	0	87
2	10	0	100
3	9	0	98
4	8	2	76
5	7	0	113
6	7	2	98
7	7	2	120
8	7	0	113
9	8	0	102
10	9	0	102
11	9	0	102
12	7	0	85
13	9	0	115
14	7	0	91
15	7	0	89
16	9	0	93
17	9	0	98

SU 9 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	7	0	107
19	7	0	120
20	7	0	96
21	7	0	91
22	7	0	100
23	7	0	93
24	9	0	89
25	8	0	89
26	9	0	93
27	9	2	98
28	9	2	96
29	8	0	96
30	7	0	115
31	7	0	104
32	8	0	91
33	8	2	109
34	8	0	83

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 10 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	96
2	6	5	85
3	7	2	100
4	7	2	113
5	6	0	113
6	6	0	102
7	8	0	124
8	7	0	111
9	7	0	111
10	6	0	100
11	6	0	83
12	6	0	74
13	7	2	111
14	6	0	80
15	6	0	87
16	7	0	107
17	6	0	93

SU 10 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	7	0	104
19	7	0	113
20	7	0	111
21	6	0	76
22	7	0	120
23	7	0	98
24	7	0	113
25	8	0	117
26	8	0	52
27	8	0	76
28	7	0	107
29	7	0	89
30	7	0	111
31	6	0	96
32	6	0	128
33	7	0	124
34	7	2	98

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 11 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	9	0	104
2	8	0	100
3	8	0	115
4	5	0	93
5	6	0	115
6	7	0	107
7	7	0	89
8	8	0	78
9	8	0	91
10	8	0	107
11	8	0	111
12	8	0	120
13	7	2	87
14	8	0	76
15	7	0	91
16	7	0	128
17	7	0	67
18	7	0	87

SU 11 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	0	111
19	6	0	1
20	5	0	72
21	5	0	111
22	6	2	91
23	6	0	76
24	7	0	83
25	7	0	96
26	6	0	93
27	6	0	126
28	6	0	93
29	6	0	102
30	6	0	80
31	7	0	85
32	7	0	85
33	6	0	104
34	6	0	100

Note: Sequence error occurred during initial lay out of direct measurement location number 18. Measurement location number 18 for SU-11 will occur at both floors and walls and at overheads.

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 12 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	78
2	5	0	96
3	6	0	128
4	5	0	74
5	5	0	96
6	5	0	85
7	6	0	93
8	6	0	117
9	5	0	98
10	5	0	83
11	5	0	102
12	5	0	91
13	7	0	87
14	6	0	100
15	7	0	96
16	5	0	107
17	6	0	85
18	7	0	111

SU 12 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	5	0	102
20	5	0	115
21	5	0	104
22	4	0	126
23	4	0	91
24	5	0	120
25	5	0	102
26	6	0	93
27	6	0	113
28	5	0	98
29	5	0	107
30	5	0	104
31	6	0	67
32	5	0	107
33	6	0	100
34	5	2	104
35	5	0	80
36	5	0	113
37	5	0	89

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 13 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	104
2	6	2	98
3	5	0	107
4	5	0	78
5	7	0	72
6	7	0	89
7	7	0	93
8	6	0	83
9	6	0	111
10	7	0	113
11	7	0	93
12	6	0	139
13	6	0	91
14	6	2	120
15	7	0	91
16	7	0	100
17	6	0	78

SU 13 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	91
19	5	2	122
20	5	0	115
21	5	2	102
22	5	0	111
23	5	0	91
24	5	2	93
25	5	0	87
26	5	0	91
27	5	2	96
28	5	2	115
29	5	0	96
30	8	2	133
31	5	0	122
32	8	0	107
33	8	0	104
34	8	0	98

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 14 Floors/ Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	102
2	6	0	76
3	5	0	120
4	5	0	107
5	6	0	89
6	5	0	72
7	5	0	135
8	5	0	107
9	5	0	70
10	4	0	104
11	5	0	87
12	5	0	91
13	4	0	104
14	5	0	100
15	5	0	104
16	5	0	111
17	5	0	93

SU 14 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	102
19	6	0	76
20	5	0	120
21	5	0	107
22	6	0	89
23	5	0	72
24	5	0	135
25	5	0	107
26	5	0	70
27	4	0	104
28	5	0	87
29	5	0	91
30	4	0	104
31	5	0	100
32	5	0	104
33	5	0	111
34	5	0	93

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 15 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	100
2	7	0	102
3	7	0	117
4	6	0	98
5	6	0	80
6	6	0	124
7	6	0	102
8	7	0	80
9	7	0	78
10	6	0	107
11	6	2	98
12	8	0	87
13	8	0	83
14	5	0	87
15	5	0	89
16	7	0	78
17	7	0	102
18	7	0	117
19	6	0	59
20	7	0	78
21	6	0	104

SU 15 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
21	5	2	104
22	5	0	72
23	6	0	96
24	5	0	96
25	5	0	89
26	4	0	83
27	5	0	96
28	5	0	87
29	5	2	115
30	5	0	104
31	5	2	91
32	5	0	98
33	4	0	93
34	4	0	80
35	5	0	126
36	5	0	102
37	5	0	104

Note: Sequence error occurred during initial lay out of direct measurement location number 21. Measurement location number 21 for SU-15 will occur at both floors and walls and at overheads. Data has been confirmed.

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 16 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	89
2	5	0	104
3	5	0	72
4	5	0	98
5	6	0	85
6	6	0	78
7	6	0	85
8	6	0	87
9	6	2	107
10	5	0	102
11	5	0	93
12	5	0	120
13	6	0	107
14	6	0	98
15	5	0	83
16	6	0	113
17	5	2	126

SU 16 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	2	98
19	5	0	107
20	5	2	102
21	4	0	83
22	4	0	96
23	5	0	102
24	5	2	89
25	4	0	100
26	5	0	91
27	5	0	87
28	5	0	74
29	4	0	109
30	4	2	109
31	5	0	91
32	4	0	98
33	5	0	122
34	5	0	104

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 17 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	4	2	100
19	4	0	120
20	5	0	117
21	5	0	96
22	5	0	102
23	5	0	109
24	4	0	98
25	5	0	122
26	6	0	126
27	5	0	122
28	5	0	91
29	4	0	120
30	5	0	102
31	5	0	113
32	5	0	109
33	5	0	122
34	6	0	102

SU 17 Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	2	100
2	5	2	128
3	5	2	107
4	6	0	128
5	6	2	115
6	5	2	133
7	5	0	107
8	5	2	111
9	5	2	120
10	6	2	93
11	6	0	122
12	5	0	93
13	5	2	91
14	4	0	87
15	5	0	124
16	5	2	104
17	5	0	115

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 17 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	5	0	113
36	5	0	100
37	5	0	100
38	6	0	130
39	6	0	93
40	5	0	115
41	5	0	107
42	4	2	115
43	4	0	96
44	5	2	122
45	5	0	96
46	5	0	120
47	4	0	111
48	5	0	57
49	4	0	120
50	5	0	111
51	5	0	111

SU 18 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	4	0	70
20	4	2	124
21	4	0	70
22	5	0	111
23	5	0	87
24	5	2	102
25	5	0	83
26	5	0	96
27	5	0	89
28	5	0	76
29	5	0	91
30	5	2	111
31	4	2	74
32	5	2	67
33	4	0	91
34	5	0	100
35	5	2	104
36	6	0	104
37	6	0	100
38	5	2	93

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 18 Walls < 6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	4	0	129
2	4	2	91
3	5	0	85
4	5	0	98
5	5	0	102
6	5	0	89
7	6	0	96
8	5	0	111
9	5	0	98
10	6	0	76
11	5	0	83
12	5	0	89
13	5	0	96
14	5	0	70
15	6	2	93
16	5	0	93
17	5	0	113
18	5	0	96

SU 18 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
39	5	0	126
40	5	0	96
41	5	0	98
42	5	2	78
43	5	0	93
44	4	0	91
45	5	0	104
46	4	0	109
47	5	0	117
48	5	0	96
49	5	0	122
50	5	0	66
51	5	0	85
52	5	0	89
53	4	2	87
54	5	0	109
55	5	0	76

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 19 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	107
2	5	0	87
3	5	0	89
4	4	0	91
5	4	0	100
6	5	0	111
7	5	0	139
8	5	0	109
9	6	0	85
10	5	0	102
11	6	0	98
12	6	5	93
13	6	0	80
14	6	0	91
15	5	0	83
16	5	0	96
17	5	0	93

SU 19 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	93
19	5	0	122
20	4	2	91
21	4	0	93
22	4	0	120
23	5	0	117
24	5	0	93
25	6	0	113
26	5	0	91
27	6	0	87
28	6	0	76
29	4	0	93
30	4	0	111
31	5	0	100
32	5	0	67
33	5	0	76
34	5	2	76

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 20 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	85
2	7	0	113
3	6	0	57
4	6	2	93
5	6	0	107
6	7	0	100
7	7	0	89
8	7	0	89
9	6	2	65
10	7	0	107
11	6	0	100
12	6	0	74
13	6	0	117
14	6	0	109
15	6	0	93
16	6	0	96
17	5	0	104
18	5	0	67

SU 20 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	5	0	91
20	5	5	96
21	5	0	93
22	5	0	109
23	5	0	89
24	5	2	85
25	5	0	83
26	5	0	80
27	5	2	96
28	5	0	76
29	5	0	80
30	5	0	104
31	5	0	93
32	5	0	80
33	5	2	91
34	5	0	109
35	5	0	83

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 21 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	102
2	6	0	107
3	5	2	117
4	5	0	117
5	5	0	96
6	5	2	104
7	5	0	115
8	6	2	91
9	5	0	111
10	5	0	87
11	5	0	98
12	5	0	76
13	5	0	72
14	6	0	93
15	5	0	137
16	5	0	87
17	5	0	85

SU 21 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	5	2	87
20	5	0	72
21	5	0	111
22	5	2	83
23	5	0	117
24	5	0	96
25	5	0	104
26	5	0	74
27	5	0	115
28	5	0	74
29	5	0	107
30	6	2	117
31	6	0	107
32	5	2	93
33	5	0	96
34	5	0	111
35	5	0	107

Note: Measurement point number 18 was not used in the development of the initial survey maps.

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 22 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	87
2	5	0	104
3	5	0	87
4	6	2	80
5	6	0	76
6	6	0	111
7	5	2	80
8	6	2	104
9	6	0	87
10	6	0	98
11	6	0	67
12	6	0	93
13	5	0	96
14	5	0	109
15	5	0	113
16	5	0	57
17	5	0	109
18	5	0	128

SU 22 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	5	0	93
20	5	0	83
21	6	0	80
22	6	0	96
23	6	2	98
24	5	0	104
25	5	0	100
26	5	2	107
27	4	5	100
28	5	0	96
29	5	0	76
30	4	0	85
31	5	0	141
32	4	0	126
33	5	0	111
34	5	0	107
35	5	2	109

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 23 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	72
2	5	0	111
3	5	0	109
4	5	2	74
5	5	0	91
6	5	0	104
7	5	0	74
8	4	0	87
9	4	2	102
10	5	0	111
11	5	0	98
12	5	0	93
13	5	0	96
14	5	0	80
15	5	0	93
16	5	0	124
17	4	0	93

SU 23 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	113
19	5	2	87
20	4	0	107
21	5	0	107
22	5	0	96
23	5	0	107
24	5	0	89
25	5	0	113
26	5	0	93
27	5	0	109
28	4	0	126
29	5	0	120
30	5	0	100
31	5	0	120
32	4	0	96
33	5	0	100
34	5	0	89

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 24 Floors/ Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	2	76
2	5	0	130
3	5	0	93
4	5	0	85
5	5	2	100
6	5	0	76
7	5	0	104
8	5	0	96
9	5	0	93
10	5	0	83
11	5	0	111
12	5	2	93
13	5	0	100
14	5	0	102
15	5	0	87
16	5	0	87
17	5	0	74

SU 24 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	96
19	5	0	102
20	6	0	100
21	5	0	100
22	6	0	109
23	5	0	85
24	5	0	93
25	5	0	85
26	5	2	104
27	4	0	102
28	5	0	109
29	5	0	102
30	4	0	100
31	5	0	117
32	6	0	96
33	5	0	85
34	5	0	102

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 25 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	4	2	104
2	5	0	96
3	5	0	100
4	5	0	96
5	5	0	85
6	5	0	93
7	5	0	89
8	8	0	107
9	5	0	93
10	5	0	70
11	5	0	87
12	4	0	109
13	4	0	98
14	5	0	100
15	5	0	102
16	5	0	100
17	5	0	109

SU 25 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	4	0	104
19	4	0	109
20	5	2	96
21	4	0	83
22	5	0	107
23	5	0	122
24	5	0	102
25	5	5	89
26	5	0	93
27	5	0	111
28	5	0	91
29	4	2	107
30	4	0	122
31	5	0	91
32	4	0	113
33	5	0	102
34	5	0	91

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 26 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	102
19	5	0	107
20	4	5	115
21	4	0	102
22	5	2	109
23	5	2	130
24	5	0	100
25	6	0	113
26	5	0	87
27	6	2	76
28	6	0	120
29	5	0	109
30	5	0	89
31	5	0	104
32	5	0	111
33	6	2	98
34	6	0	100
35	5	0	122
36	5	0	91
37	5	0	124

SU 26 Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	154
2	5	0	130
3	5	0	107
4	6	2	109
5	6	2	109
6	5	0	117
7	5	2	91
8	5	2	124
9	5	0	93
10	4	0	100
11	4	0	83
12	5	0	107
13	5	0	93
14	6	0	130
15	5	2	100
16	5	0	104
17	5	2	102

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 26 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
38	5	0	96
39	5	2	107
40	5	2	120
41	5	0	93
42	5	0	102
43	4	0	85
44	4	0	139
45	5	0	104
46	5	0	102
47	5	0	96
48	5	0	124
49	5	0	102
50	4	0	133
51	4	0	115
52	5	0	100
53	5	0	104
54	5	2	80

SU 27 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	2	111
2	5	0	115
3	5	0	100
4	5	2	126
5	5	0	96
6	5	2	104
7	5	0	93
8	5	0	96
9	5	0	93
10	5	0	115
11	5	0	113
12	5	5	93
13	5	0	91
14	5	0	104
15	5	0	85
16	5	0	113
17	5	2	98

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 28 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	113
2	5	0	100
3	6	0	100
4	6	0	130
5	5	0	93
6	4	2	115
7	5	0	107
8	5	2	115
9	5	0	96
10	6	0	122
11	6	0	96
12	5	0	120
13	5	2	111
14	5	0	57
15	6	0	120
16	5	0	111
17	5	0	111

SU 29 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	102
2	7	0	80
3	6	0	107
4	6	0	113
5	6	0	93
6	7	2	115
7	6	0	85
8	7	0	93
9	7	0	98
10	7	0	74
11	6	2	100
12	6	0	109
13	7	0	83
14	7	2	104
15	7	0	89
16	6	0	96
17	7	2	113

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 30 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	96
2	6	0	78
3	6	0	113
4	6	0	76
5	7	0	89
6	6	0	107
7	8	0	120
8	7	0	76
9	7	0	102
10	6	0	74
11	6	0	107
12	7	0	111
13	7	0	87
14	8	0	113
15	7	0	93
16	6	0	96
17	7	0	100

SU 30 Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	2	85
19	6	0	109
20	6	0	102
21	7	0	100
22	7	0	102
23	6	0	93
24	7	0	72
25	7	2	107
26	6	0	91
27	7	2	85
28	6	0	96
29	7	0	102
30	6	0	98
31	6	2	93
32	7	0	107
33	7	0	113
34	8	0	63
35	8	0	83

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 30 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
36	5	0	102
37	5	0	111
38	5	0	98
39	4	0	113
40	4	0	83
41	5	0	91
42	5	2	107
43	5	0	96
44	6	0	117
45	5	0	98
46	6	0	128
47	6	0	100
48	6	0	102
49	6	2	100
50	5	0	109
51	5	0	96
52	5	0	98
53	5	0	98

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 31 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	93
2	5	0	72
3	5	0	117
4	5	0	96
5	6	0	104
6	5	0	111
7	5	0	107
8	5	0	87
9	6	0	85
10	5	2	87
11	5	0	76
12	6	0	93
13	5	0	111
14	5	0	96
15	5	0	91
16	5	0	107
17	5	0	87

SU 31 Wall <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	98
19	5	0	87
20	5	0	111
21	5	0	117
22	5	0	87
23	5	0	91
24	5	2	96
25	5	0	98
26	5	0	85
27	5	0	91
28	5	0	89
29	6	0	107
30	6	0	102
31	5	2	111
32	5	0	100
33	5	0	111
34	5	0	107

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 31 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	6	0	100
36	5	0	98
37	5	0	126
38	6	2	87
39	6	0	91
40	6	0	100
41	5	0	91
42	6	2	111
43	6	0	85
44	6	0	87
45	6	2	102
46	6	2	100
47	5	0	87
48	5	0	89
49	5	0	111
50	5	0	87
51	5	0	98

SU 32 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	93
2	6	0	83
3	6	0	80
4	5	2	96
5	6	0	98
6	5	0	104
7	6	0	100
8	6	0	107
9	6	2	100
10	5	0	96
11	6	2	76
12	6	2	85
13	5	0	141
14	5	0	126
15	6	0	111
16	5	5	107
17	5	0	109
18	5	0	100

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 33 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	109
2	5	0	96
3	5	0	74
4	5	0	93
5	5	2	91
6	5	0	96
7	5	0	107
8	6	0	85
9	5	2	111
10	6	0	96
11	5	0	98
12	5	0	98
13	5	0	85
14	5	0	102
15	5	0	102
16	5	0	100
17	4	0	93

SU 33 Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	91
19	5	0	87
20	5	0	100
21	6	0	100
22	5	2	85
23	5	0	107
24	5	0	98
25	6	0	102
26	6	0	96
27	5	0	102
28	5	0	109
29	5	0	111
30	5	0	130
31	5	0	107
32	6	0	111
33	5	0	85
34	5	0	83

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 33 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	5	0	100
36	5	0	87
37	5	2	87
38	5	0	100
39	5	2	107
40	5	0	91
41	6	0	85
42	5	2	102
43	5	0	85
44	5	0	104
45	5	2	109
46	5	2	91
47	6	0	100
48	6	0	107
49	5	0	102
50	5	0	111
51	5	0	100

SU 34 Floors/Wall s <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	102
2	5	0	100
3	6	0	111
4	6	0	100
5	5	2	87
6	5	0	89
7	5	0	89
8	6	0	104
9	6	0	107
10	6	0	102
11	4	0	98
12	5	0	87
13	5	0	89
14	5	0	107
15	5	0	85
16	6	0	87
17	5	0	89

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 35 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	2	76
2	7	0	98
3	7	0	91
4	8	0	107
5	7	0	113
6	8	0	91
7	8	0	87
8	7	0	83
9	8	0	96
10	7	0	102
11	8	0	100
12	7	0	117
13	7	2	100
14	8	2	96
15	7	0	109
16	8	0	98
17	7	0	128
18	8	0	98

SU 35 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	7	0	104
20	7	0	109
21	8	2	96
22	7	0	83
23	8	0	98
24	8	0	100
25	7	0	102
26	7	5	85
27	7	0	87
28	8	0	113
29	8	0	91
30	8	2	87
31	7	0	122
32	7	0	109
33	8	0	96
34	7	0	104
35	7	0	107
36	7	0	96

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 36 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	76
2	7	0	102
3	7	0	98
4	8	0	87
5	8	2	96
6	8	2	89
7	7	2	102
8	7	5	76
9	8	0	115
10	7	0	91
11	8	0	109
12	8	0	117
13	8	0	96
14	7	0	85
15	7	0	122
16	8	0	83
17	6	0	111
18	5	0	87

SU 36 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	7	0	117
20	7	0	130
21	8	0	102
22	7	2	98
23	7	2	83
24	8	0	96
25	7	2	93
26	7	2	85
27	7	0	111
28	7	0	109
29	7	0	107
30	8	0	102
31	7	0	100
32	7	0	126
33	7	2	100
34	8	0	102
35	8	2	87
36	8	0	91

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 37 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	87
2	7	2	98
3	7	0	96
4	7	0	115
5	8	2	93
6	7	0	83
7	8	0	87
8	8	0	111
9	7	2	107
10	7	0	87
11	7	0	85
12	7	2	74
13	7	0	113
14	8	0	80
15	8	0	83
16	7	0	78
17	7	0	98

SU 37 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	8	2	115
19	7	0	111
20	7	0	100
21	7	0	102
22	7	0	91
23	8	0	96
24	7	0	98
25	8	0	85
26	7	2	117
27	7	2	89
28	7	0	96
29	7	0	100
30	8	0	107
31	8	0	102
32	7	0	85
33	7	0	113
34	7	0	98

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 38 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	100
2	5	0	113
3	4	2	96
4	5	0	87
5	5	0	107
6	4	0	102
7	4	0	85
8	4	0	78
9	5	0	98
10	5	0	87
11	4	2	91
12	5	0	87
13	5	0	107
14	5	0	85
15	4	0	100
16	5	0	111
17	5	0	87

SU 38 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	80
19	4	0	102
20	4	0	107
21	4	0	96
22	4	0	111
23	5	0	91
24	4	0	89
25	5	0	91
26	5	0	96
27	5	0	107
28	4	2	100
29	4	0	109
30	4	0	100
31	4	0	91
32	4	0	85
33	5	0	104
34	4	0	102

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 39 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	117
2	7	0	76
3	7	0	109
4	7	2	104
5	7	0	91
6	8	0	100
7	8	0	113
8	7	0	104
9	7	0	117
10	7	0	85
11	7	0	100
12	6	0	98
13	6	0	100
14	7	0	117
15	7	0	76
16	8	0	67
17	7	0	87

SU 39 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	7	2	109
19	6	0	85
20	7	0	98
21	7	2	85
22	7	0	100
23	8	0	102
24	7	0	109
25	8	0	89
26	7	0	107
27	7	0	100
28	7	0	96
29	6	0	102
30	7	0	91
31	7	2	87
32	7	0	85
33	7	2	104
34	7	2	100

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 40 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	102
2	5	0	111
3	5	0	98
4	4	0	113
5	4	0	83
6	5	0	91
7	5	2	107
8	5	0	96
9	6	0	117
10	5	0	98
11	6	0	128
12	6	0	100
13	6	0	102
14	6	2	100
15	5	0	109
16	5	0	96
17	5	0	98

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 41 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	5	0	96
20	5	0	117
21	5	0	89
22	5	0	93
23	5	0	104
24	5	0	93
25	5	0	93
26	5	0	117
27	5	0	70
28	5	0	126
29	5	0	109
30	5	2	107
31	5	0	83
32	5	0	93
33	5	2	109
34	5	0	120
35	5	0	100

SU 41 Wall <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	85
2	5	0	98
3	5	0	89
4	5	0	83
5	5	0	96
6	5	0	104
7	5	0	107
8	5	0	107
9	5	0	65
10	5	2	107
11	5	0	74
12	5	0	111
13	5	0	130
14	5	0	107
15	5	2	93
16	5	2	89
17	5	0	104
18	5	0	80

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 41 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
36	5	2	78
37	5	0	80
38	5	0	93
39	5	0	104
40	5	0	93
41	5	0	117
42	5	2	98
43	5	0	111
44	5	0	85
45	5	0	87
46	5	0	102
47	5	0	100
48	5	0	87
49	5	0	89
50	5	0	111
51	5	0	87
52	5	0	98

SU 42 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
20	6	0	98
21	6	0	115
22	6	0	117
23	6	0	115
24	6	0	107
25	5	0	122
26	5	0	104
27	5	0	87
28	6	0	67
29	6	0	109
30	6	0	78
31	6	0	117
32	5	2	102
33	5	0	128
34	6	2	91
35	6	0	98
36	6	2	91

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 42 Walls <6 feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	111
2	6	2	100
3	6	0	93
4	6	0	67
5	6	2	111
6	6	0	76
7	6	0	109
8	5	0	117
9	5	0	120
10	6	0	124
11	6	0	98
12	6	0	122
13	6	0	120
14	6	0	100
15	6	2	120
16	5	2	100
17	4	2	74
18	6	0	76
19	6	0	124

SU 42 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
37	5	0	104
38	5	0	126
39	5	0	111
40	4	0	102
41	4	0	115
42	4	0	59
43	5	0	109
44	5	0	87
45	4	0	115
46	5	0	104
47	4	2	93
48	4	0	115
49	5	0	98
50	5	0	102
51	4	0	133
52	4	5	74
53	4	0	93

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 43 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	102
2	5	0	98
3	5	0	83
4	5	0	113
5	5	0	91
6	5	0	93
7	5	0	100
8	5	0	98
9	5	0	87
10	5	0	67
11	5	0	98
12	5	0	70
13	5	0	91
14	5	2	85
15	5	0	109
16	5	0	102
17	4	0	100
18	5	0	87

SU 43 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	5	0	83
20	5	0	100
21	6	0	93
22	5	0	98
23	6	0	93
24	5	0	96
25	5	0	117
26	5	2	85
27	5	2	98
28	5	0	93
29	4	0	96
30	4	0	102
31	5	0	70
32	5	0	87
33	5	0	78
34	5	0	76
35	5	0	113

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 44 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	117
2	5	0	74
3	6	0	87
4	5	0	104
5	5	0	102
6	5	0	93
7	5	0	102
8	5	0	104
9	5	0	113
10	5	0	109
11	5	0	70
12	5	0	91
13	5	0	104
14	5	0	83
15	5	0	80
16	5	0	85
17	5	0	98

SU 44 Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	4	0	109
19	4	0	100
20	5	0	96
21	5	0	107
22	5	2	91
23	4	2	96
24	5	0	93
25	5	0	109
26	6	0	98
27	6	0	100
28	5	0	107
29	5	0	120
30	5	0	85
31	5	0	100
32	4	0	104
33	4	0	98
34	6	0	148
35	5	2	107
36	5	0	115
37	5	2	117
38	5	0	100

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 44 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
39	5	0	102
40	5	2	78
41	5	0	104
42	5	0	98
43	6	0	107
44	6	0	87
45	5	0	104
46	5	0	83
47	5	0	107
48	5	0	80
49	5	0	63
50	4	2	104
51	4	0	78
52	5	0	93
53	5	0	100
54	5	0	100
55	5	0	111

SU 45 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	111
2	5	0	115
3	5	0	102
4	4	0	100
5	4	2	102
6	5	0	83
7	5	0	93
8	4	0	96
9	4	0	87
10	5	0	85
11	5	2	89
12	5	0	98
13	4	0	124
14	4	2	135
15	5	0	96
16	5	0	102
17	5	0	100

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 45 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	4	2	104
19	4	2	109
20	5	0	87
21	5	0	65
22	5	0	98
23	4	0	76
24	5	0	124
25	4	0	107
26	4	0	104
27	5	0	91
28	5	0	91
29	5	0	104
30	4	0	93
31	4	0	109
32	5	0	115
33	5	2	128
34	5	2	107
35	5	5	87

SU 46 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	7	0	98
2	6	0	109
3	6	0	111
4	7	2	89
5	7	0	104
6	7	0	102
7	7	0	117
8	6	0	85
9	6	0	113
10	6	0	93
11	6	0	100
12	6	0	102
13	6	0	96
14	7	0	102
15	7	0	115
16	8	0	93
17	8	0	130

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 46 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	0	113
19	6	0	109
20	6	0	124
21	7	0	100
22	6	0	124
23	5	0	98
24	5	0	117
25	5	2	128
26	5	0	109
27	6	0	102
28	5	0	96
29	6	0	109
30	6	0	87
31	6	2	102
32	6	2	89
33	5	0	113
34	5	0	117

SU 47 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	87
2	5	0	91
3	6	0	104
4	6	0	85
5	5	0	120
6	5	0	80
7	5	0	117
8	5	0	130
9	5	0	109
10	6	0	91
11	5	0	83
12	5	0	85
13	5	0	74
14	5	0	93
15	5	0	104
16	5	0	98
17	5	0	107

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 47 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	98
19	5	0	83
20	5	0	80
21	5	0	83
22	5	0	100
23	5	0	128
24	5	0	100
25	5	0	85
26	5	2	100
27	5	2	111
28	5	0	109
29	5	0	102
30	5	0	91
31	4	0	93
32	4	0	87
33	4	0	111
34	4	0	76

SU 47 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	5	0	104
36	5	0	93
37	5	0	83
38	4	0	72
39	5	0	89
40	4	0	85
41	5	0	70
42	5	0	85
43	5	0	100
44	5	2	102
45	5	0	104
46	5	0	74
47	4	0	111
48	5	0	85
49	5	5	83
50	5	0	87
51	5	2	96

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 48 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	102
2	6	0	128
3	7	0	93
4	6	0	109
5	5	0	61
6	5	0	87
7	5	0	91
8	6	2	107
9	5	0	109
10	6	0	93
11	5	0	117
12	5	0	109
13	5	0	107
14	6	2	111
15	5	0	83
16	5	2	89
17	5	0	98

SU 48 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	93
19	5	0	122
20	5	5	91
21	4	0	93
22	4	0	120
23	5	0	117
24	5	0	93
25	5	0	113
26	5	0	91
27	4	0	87
28	4	0	76
29	5	0	93
30	5	0	111
31	5	0	100
32	4	0	67
33	5	0	76
34	5	0	76

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 49 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	111
2	5	0	91
3	5	0	102
4	4	0	100
5	4	2	80
6	5	2	96
7	6	0	126
8	5	0	104
9	5	2	89
10	6	0	122
11	5	0	111
12	5	2	87
13	5	0	93
14	5	0	109
15	5	0	85
16	5	0	91
17	5	0	93

SU 49 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	107
19	5	2	130
20	4	0	111
21	4	0	91
22	5	0	74
23	5	0	91
24	4	2	89
25	5	0	96
26	5	0	124
27	5	0	130
28	5	0	109
29	5	0	113
30	6	0	98
31	6	0	122
32	5	2	96
33	5	0	128
34	5	0	113

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 50 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	2	109
2	5	0	96
3	5	2	100
4	5	0	120
5	5	0	111
6	5	0	115
7	5	0	107
8	5	0	117
9	5	2	124
10	5	0	89
11	5	0	91
12	5	0	130
13	5	0	115
14	5	2	98
15	5	2	124
16	5	5	124
17	5	0	78

SU 50 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	109
19	5	0	120
20	5	0	104
21	5	0	115
22	6	0	113
23	6	0	122
24	5	2	89
25	5	0	124
26	5	0	89
27	5	0	83
28	6	2	128
29	5	0	109
30	5	0	89
31	6	0	83
32	5	0	80
33	5	2	98
34	5	0	107

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 51 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	100
2	6	0	91
3	6	0	52
4	5	0	122
5	5	2	76
6	4	0	76
7	4	0	91
8	5	0	89
9	5	2	100
10	5	0	80
11	5	0	91
12	6	0	107
13	6	0	111
14	6	2	117
15	6	2	104
16	6	0	104
17	6	0	87

SU 51 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	6	0	78
19	6	2	104
20	5	0	102
21	6	0	98
22	6	0	80
23	6	0	130
24	5	0	96
25	5	0	83
26	6	0	104
27	5	0	85
28	6	2	80
29	6	0	98
30	5	0	102
31	6	0	115
32	6	0	109
33	5	0	100
34	5	0	96
35	5	0	74

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 52 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	85
2	5	2	102
3	5	0	137
4	5	0	117
5	4	0	128
6	4	0	93
7	5	2	109
8	5	0	87
9	5	2	102
10	5	0	117
11	5	2	76
12	4	0	96
13	5	0	109
14	4	0	89
15	5	0	100
16	5	0	107
17	5	0	76

SU 52 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	113
19	5	0	111
20	4	0	98
21	5	0	98
22	4	0	100
23	5	0	93
24	5	0	104
25	4	0	80
26	5	0	93
27	5	0	87
28	5	0	80
29	5	0	113
30	6	2	130
31	6	0	107
32	5	0	104
33	5	0	91
34	5	0	115

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 53 Walls <6 feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	11	0	111
2	10	0	83
3	9	0	104
4	9	2	124
5	11	0	96
6	12	0	98
7	12	0	93
8	11	0	74
9	11	0	78
10	11	0	91
11	11	0	122
12	10	0	89
13	11	0	109
14	12	0	124
15	12	0	111
16	12	0	122
17	12	0	107

SU 53 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	9	0	89
19	9	0	74
20	8	0	109
21	8	0	93
22	9	0	96
23	9	0	96
24	9	0	96
25	9	0	107
26	9	0	93
27	8	0	98
28	9	0	113
29	8	0	120
30	8	2	70
31	9	0	109
32	8	0	115
33	8	0	100
34	8	0	113

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 54 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	87
2	5	0	100
3	5	2	102
4	5	0	96
5	5	0	120
6	6	0	115
7	5	0	107
8	6	2	102
9	5	0	126
10	5	0	93
11	5	2	98
12	6	0	80
13	5	0	104
14	5	0	111
15	5	0	89
16	5	0	109
17	6	0	109

SU 54 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	111
19	5	0	102
20	4	0	120
21	5	0	117
22	5	0	96
23	5	0	85
24	5	0	109
25	5	0	96
26	5	0	111
27	5	0	107
28	5	0	104
29	4	0	87
30	4	0	96
31	5	0	100
32	5	0	91
33	5	0	113
34	5	0	85

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 55 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	96
2	5	2	91
3	5	0	78
4	5	0	102
5	5	0	70
6	5	0	93
7	5	0	115
8	5	0	100
9	5	0	104
10	5	0	104
11	5	0	63
12	5	5	93
13	5	0	89
14	5	0	104
15	5	0	85
16	5	0	111
17	5	0	117

SU 55 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	4	0	89
19	5	0	100
20	5	0	115
21	5	2	80
22	6	0	91
23	6	0	102
24	5	0	122
25	5	0	80
26	5	0	89
27	6	0	100
28	5	0	107
29	5	0	122
30	5	0	113
31	5	2	102
32	5	0	98
33	5	0	85
34	6	0	91
35	6	0	96

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 56 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	87
2	5	0	100
3	5	2	102
4	5	0	96
5	5	0	120
6	6	0	115
7	5	0	107
8	6	2	102
9	5	0	126
10	5	0	109
11	5	2	124
12	6	0	126
13	5	0	93
14	5	0	104
15	5	0	100
16	5	0	93
17	6	0	100
18	5	2	98

SU 56 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	5	2	100
20	5	0	91
21	5	2	115
22	4	0	100
23	5	0	76
24	5	0	80
25	5	2	107
26	4	0	89
27	4	0	122
28	4	0	109
29	5	0	117
30	4	0	98
31	5	0	91
32	5	2	93
33	5	0	115
34	4	5	96
35	4	0	130
36	5	0	93

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 57 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	85
2	5	0	98
3	4	0	100
4	5	2	87
5	4	0	111
6	5	0	100
7	5	0	91
8	5	0	100
9	5	0	91
10	4	2	102
11	4	0	107
12	5	0	78
13	4	0	87
14	5	0	100
15	5	0	111
16	5	0	100
17	5	0	87

SU 57 Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	70
19	5	0	111
20	5	0	93
21	5	0	91
22	5	0	109
23	5	0	93
24	4	0	98
25	5	0	85
26	5	0	111
27	4	0	104
28	5	0	91
29	5	0	93
30	5	0	100
31	5	0	111
32	5	0	87
33	5	0	93
34	5	0	107

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 57 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
35	4	0	111
36	4	0	100
37	4	2	98
38	4	0	102
39	4	2	96
40	4	0	122
41	4	0	83
42	4	2	100
43	4	0	100
44	4	0	109
45	5	0	122
46	5	5	104
47	5	0	104
48	5	0	111
49	5	0	102
50	5	2	96
51	5	0	109

SU 58 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	66
2	5	0	104
3	6	0	111
4	6	0	107
5	5	0	100
6	6	2	124
7	5	0	83
8	5	0	107
9	5	0	104
10	5	0	96
11	5	0	91
12	5	2	93
13	5	2	83
14	5	2	115
15	5	0	124
16	5	0	109
17	6	0	124

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 58 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	104
19	5	0	85
20	6	2	98
21	6	0	83
22	6	0	124
23	5	0	115
24	5	0	87
25	5	0	102
26	5	2	93
27	6	0	100
28	5	0	113
29	5	0	98
30	5	0	91
31	4	0	85
32	4	0	80
33	5	0	109
34	5	0	85

SU 59 Floors/Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	53
2	4	0	42
3	5	0	43
4	5	0	44
5	5	0	45
6	5	1	57
7	5	0	46
8	5	0	41
9	5	1	46
10	5	0	43
11	5	0	42
12	5	0	51
13	5	0	48
14	6	2	43
15	5	0	35
16	5	2	44
17	5	3	41

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 60 Walls <6 Feet	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	87
2	5	0	96
3	5	0	96
4	4	0	98
5	4	0	83
6	5	0	102
7	4	0	85
8	5	0	122
9	5	0	102
10	4	0	130
11	4	0	89
12	5	0	109
13	5	0	104
14	6	0	85
15	6	0	115
16	6	0	85
17	7	0	120
18	6	0	111
19	7	0	117
20	6	0	122
21	6	0	93
22	6	0	117
23	6	0	102
24	6	0	96
25	6	0	72

SU 60 Floors	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
26	5	2	93
27	5	0	122
28	5	2	91
29	5	0	93
30	5	0	120
31	5	0	117
32	5	0	93
33	5	0	113
34	5	0	91
35	5	2	87
36	5	5	76
37	5	0	93
38	5	0	111
39	5	0	100
40	5	2	67
41	5	2	76
42	5	0	76

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 60 Overheads	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
40	4	0	102
41	4	0	120
42	5	0	107
43	4	0	102
44	5	0	85
45	5	0	80
46	5	0	91
47	6	2	126
48	5	0	102
49	4	0	113
50	5	0	80
51	5	0	111
52	4	0	96
53	4	0	117
54	5	2	96
55	4	0	107
56	4	0	117

SU 62 Ceilings/Walls >6 Feet Class 1	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	0	120
2	4	0	122
3	4	2	100
4	4	0	102
5	4	0	98
6	4	2	96
7	5	0	76
8	5	0	89
9	5	2	96
10	4	0	87
11	5	0	117
12	5	0	74
13	5	2	120
14	5	0	100
15	5	0	83
16	5	2	91
17	5	0	117

Note: For overheads, measurement numbers were assigned starting with 40 rather than 43. They are different data points than those identified in SU-60 floors. The data has been verified.

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 62 Ceilings/Walls >6 Feet Class 2	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
18	5	0	96
19	5	0	117
20	5	0	107
21	4	2	93
22	5	0	98
23	5	0	93
24	5	0	100
25	4	0	115
26	4	0	96
27	4	5	74
28	5	0	72
29	4	0	117
30	4	0	113
31	5	0	80
32	4	0	100
33	5	0	98
34	5	0	107

SU 63 Ceilings and Walls >6 Feet Class 1	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	6	0	87
2	6	0	117
3	5	0	104
4	5	0	124
5	4	0	113
6	6	0	120
7	4	0	115
8	5	0	107
9	5	0	91
10	6	0	115
11	6	0	83
12	5	5	115
13	5	0	80
14	5	0	107
15	5	0	102
16	5	0	107
17	4	0	115
18	6	0	122

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 63 Ceilings and Walls >6 Feet Class 2	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	4	0	74
20	4	0	107
21	5	0	89
22	4	0	93
23	5	0	115
24	5	0	93
25	4	0	80
26	5	2	91
27	4	0	109
28	5	0	111
29	5	0	78
30	5	2	107
31	5	0	102
32	5	0	91
33	6	0	102
34	5	0	91
35	6	0	122

SU 64 Outer Window Sill	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	4	0	98
2	4	0	111
3	4	0	109
4	5	2	102
5	4	0	100
6	4	0	85
7	4	0	91
8	5	0	89
9	5	0	100
10	5	0	107
11	4	2	91
12	4	0	87
13	4	0	83
14	4	0	91
15	4	0	102
16	4	0	107
17	4	0	93
18	4	0	85

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

SU 65 Exterior Wall Below Sill	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
19	4	0	98
20	4	0	122
21	4	0	107
22	4	0	107
23	4	0	93
24	5	0	100
25	5	0	104
26	4	0	93
27	5	0	91
28	5	0	109
29	4	0	89
30	4	0	91
31	4	0	85
32	4	0	100
33	4	2	96
34	4	0	91
35	4	0	104
36	4	0	91

SU 66 Breezeway First Floor	Gamma Dose Rate (uR/hr)	Smear Result (dpm/100cm ²)	
		α	β
1	5	2	85
2	5	0	91
3	6	0	91
4	6	0	100
5	6	0	96
6	5	0	89
7	6	0	107
8	5	0	104
9	5	0	100
10	6	2	102
11	6	0	93
12	6	0	89
13	5	0	100
14	6	0	98
15	6	0	107
16	6	0	85
17	5	0	109

Note: Note: Although SU-64 and SU-65 are separate SU's they were surveyed as a single evolution therefore continuing the numbering sequence.

Note: Tables are ordered according to location (floors, walls, overheads) rather than numerically sequenced.

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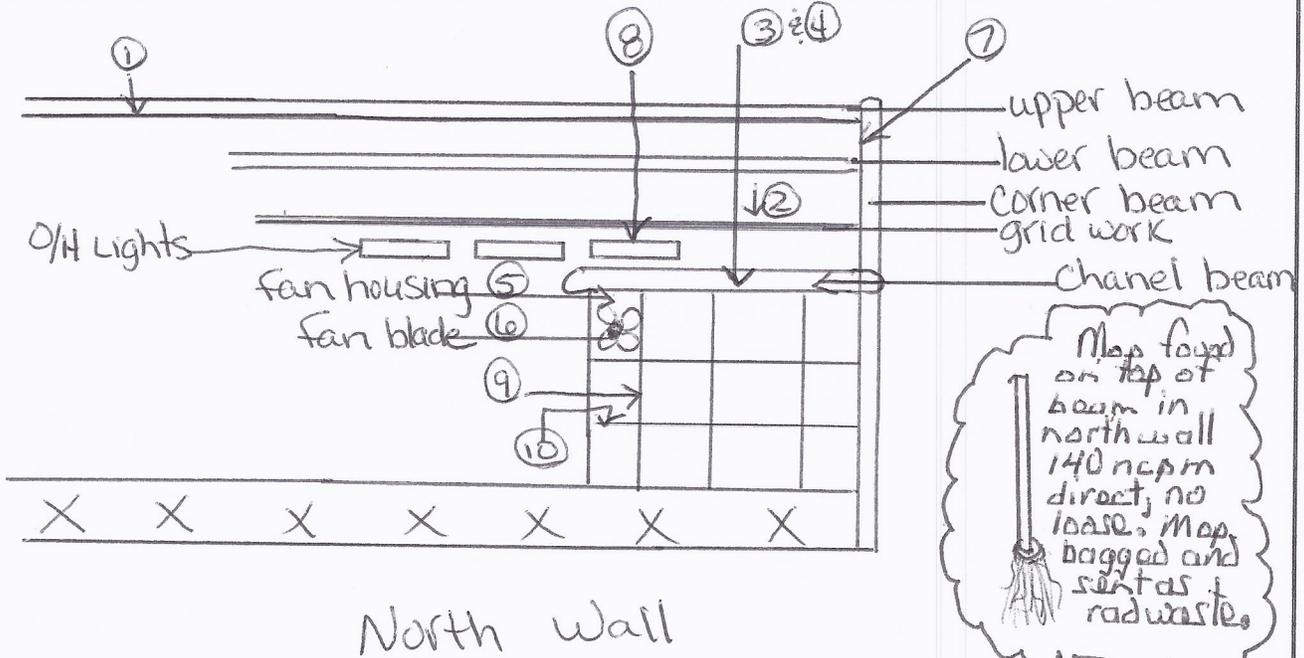
PAGE 1 of 5

ATTACHMENT 1 - RADIATION/CONTAMINATION SURVEY FORM

DATE: 12-1-10 @ 1600	TIME:	INSTRUMENTATION USED				
SURVEY NUMBER: AP-099-10	Model Inst/Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	Background (dpm/100cm ²)
LOCATION: BLDG 5-SU-9	2929	163817	2-3-11	$\alpha = .32$	$\beta = .13$	$\beta = .48$
SURVEYOR: E. PATRICK	J. Kirby					
REVIEWED BY: <i>[Signature]</i>						
PHP/SPM: R.W. Dublin						

Isotopes of Concern:

Description or drawing:



All radiation readings in $\mu\text{r/hr}$ unless otherwise noted.

- Ⓝdenotes swipe location or fixed α/β readings.
- #denotes G/A radiation readings.
- #/#denotes contact / 1 meter radiation readings.
- *denotes highest radiation reading on contact.
- Δdenotes static location.

Routine (Daily / Weekly / Monthly)

Non-routine

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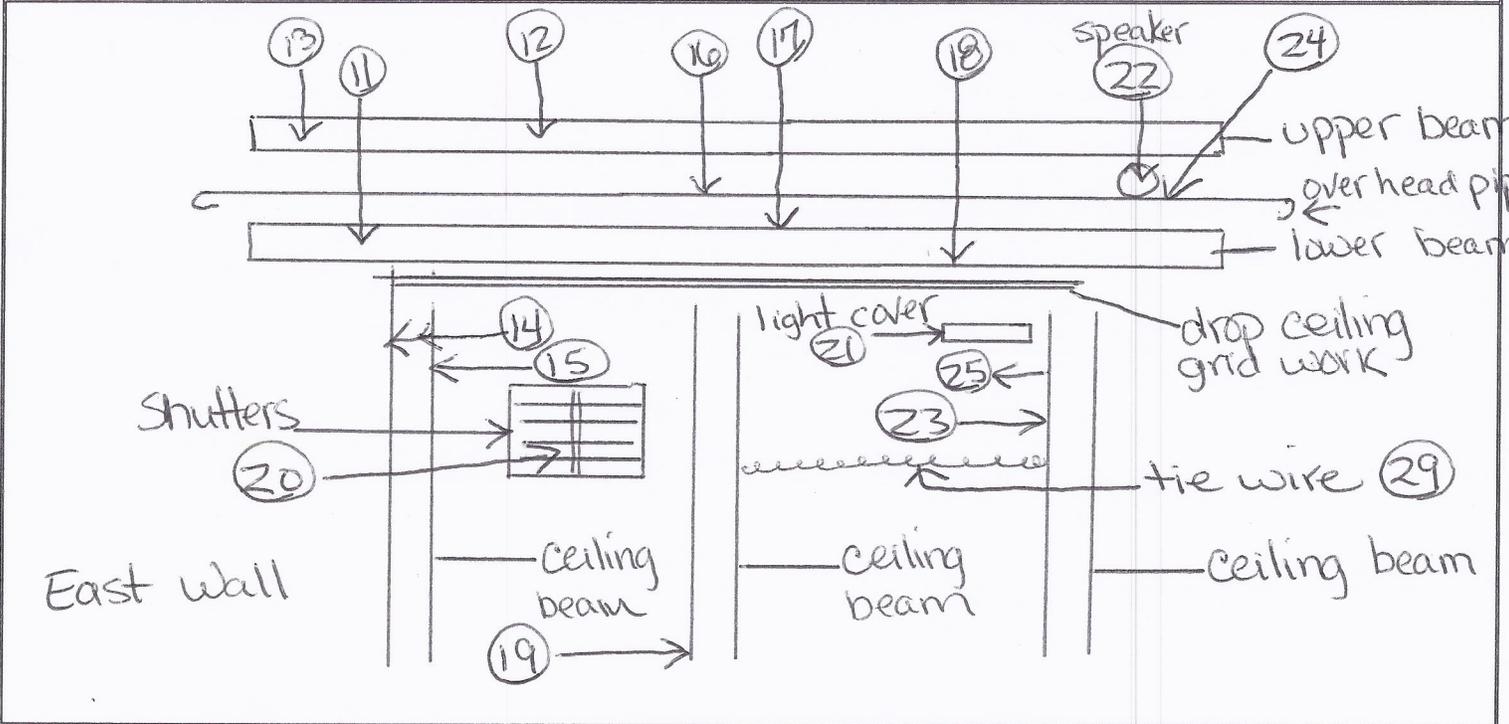
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ATTACHMENT 1 - RADIATION/CONTAMINATION SURVEY FORM

DATE:	TIME:	INSTRUMENTATION USED				
SEE PAGE 1						
SURVEY NUMBER: AP-099-10	Model Inst/Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	Background (dpm/100cm ²)
LOCATION: 549						
SURVEYOR: E.P.						
REVIEWED BY:				N/A		
PHP/SPM:						

Isotopes of Concern:

Description or drawing:



Routine (Daily / Weekly / Monthly)	(Non-routine)	All radiation readings in $\mu\text{r/hr}$ unless otherwise noted.
		#.....denotes swipe location or fixed α/β readings. #.....denotes G/A radiation readings. #/#.....denotes contact / 1 meter radiation readings. *.....denotes highest radiation reading on contact. Δdenotes static location.

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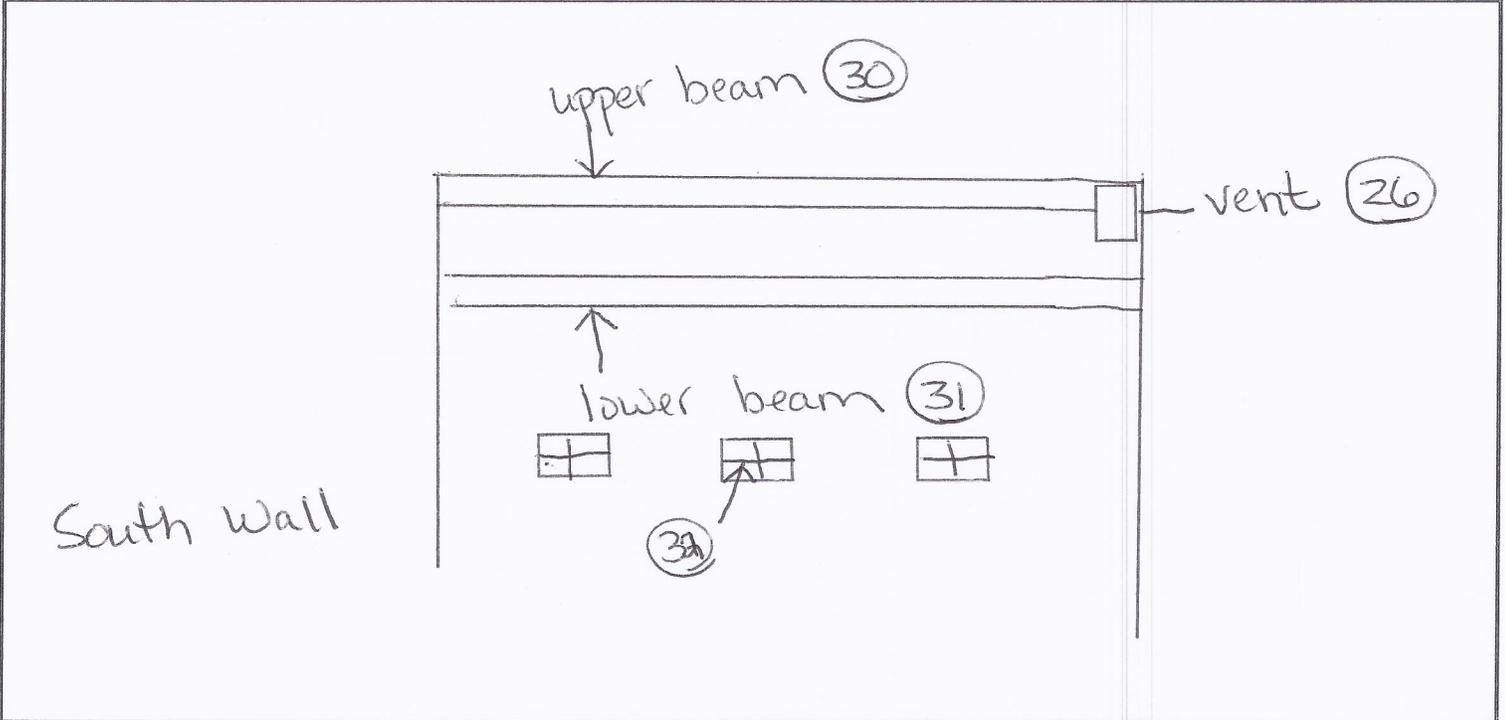
PAGE 3 OF 5

ATTACHMENT 1 - RADIATION/CONTAMINATION SURVEY FORM

DATE:	TIME:	INSTRUMENTATION USED				
SEE PAGE 1						
SURVEY NUMBER: AP-099-10	Model Inst/Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	Background (dpm/100cm ²)
LOCATION: Su9	[Handwritten scribble]					
SURVEYOR: EP						
REVIEWED BY: [Signature]			N/A			
PHP/SPM: R.W. Darlind						

Isotopes of Concern:

Description or drawing:



<p>Routine (Daily / Weekly / Monthly)</p> <p style="text-align: center;"><u>Non-routine</u></p>	<p>All radiation readings in $\mu\text{r/hr}$ unless otherwise noted.</p> <p>#denotes swipe location or fixed α/β readings.</p> <p>#denotes G/A radiation readings.</p> <p>#/#denotes contact / 1 meter radiation readings.</p> <p>*denotes highest radiation reading on contact.</p> <p>Δdenotes static location.</p>
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ATTACHMENT 2 - RADIATION/CONTAMINATION SURVEY SUPPLEMENT

SURVEY NUMBER: AP-099-10		SURVEYOR: EULON PATRICK		LOCATION: BLDG 5 SU-9				
Location	Exposure Rate (µR/hr)		Fixed + Removable			Removable		Comments
	Contact	1 Meter	Gamma (cpm)	Alpha dpm/probe	Beta/Gamma dpm/probe	Alpha dpm/100cm ²	Beta/Gamma dpm/100cm ²	
1						<MDA	<MDA	
2						<MDA	<MDA	
3						90	↓	
4						71	↓	
5						<MDA	<MDA	
6						<MDA	<MDA	
7						24	↓	
8						<MDA	↓	
9						<MDA	↓	
10						↓	↓	
11						54	↓	
12						44	↓	
13						15	↓	
14						29	↓	
15						<MDA	↓	
16						17	↓	
17						24	↓	
18						<MDA	↓	
19						↓	↓	
20						17	↓	
21						<MDA	↓	
22						<MDA	↓	
23						<MDA	↓	
24						180	290	
25						39	<MDA	
Reviewer: <i>[Signature]</i>			Date/Time: 12/2/10 0700		PHP/SPM: <i>[Signature]</i>		Date/Time: 12/2/10 0900	

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ATTACHMENT 2 - RADIATION/CONTAMINATION SURVEY SUPPLEMENT

SURVEY NUMBER: AP-099-10		SURVEYOR: ELLON PATECK		LOCATION: BLDG 5 SU-9				
Location	Exposure Rate (µR/hr)		Fixed + Removable			Removable		Comments
	Contact	1 Meter	Gamma (cpm)	Alpha dpm/probe	Beta/Gamma dpm/probe	Alpha dpm/100cm ²	Beta/Gamma dpm/100cm ²	
1 26						< MDA	< MDA	
2 27								
3 28	N/A							
4 29								
5 30								
6 31					N/A	15		
7 32						< MDA		
8						< MDA		
9								
10								
11								
12								
13								
14								
15								
16								
17					N/A			
18								
19								
20								
21								
22								
23								
24								
25								
Reviewer: <i>Stanko</i>		Date/Time: 10/2/10 0900		PHP/SPM: <i>R.W. Dubiel</i>		Date/Time: 12/2/10 0900		

Radiation and Contamination Surveys

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ATTACHMENT 1 - RADIATION/CONTAMINATION SURVEY FORM

DATE: 1/26-10 TIME: 1645		INSTRUMENTATION USED				
SURVEY NUMBER: AP-095-10	Model Inst/Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	Background (dpm/100cm ²)
LOCATION: Building 5 Su-20	222/438	190181	2-15-10	32.9/0.9	11.5	1 cpm
SURVEYOR: James Kirby	2929	163817	2-3-11	40.9 32.1	0.25 18	0.25 18
REVIEWED BY: [Signature]						
PHP/SPM: R.W. Duliel						
Isotopes of Concern: Ra 226						
Description or drawing: documentation of contamination found during FSS						
<p>29 to 40 ncpm direct scan</p>						
All swipes except #1 < MDA				<p>All radiation readings in µr/hr unless otherwise noted.</p> <p># denotes swipe location or fixed α/β readings.</p> <p># denotes G/A radiation readings.</p> <p>#/# denotes contact / 1 meter radiation readings.</p> <p>* denotes highest radiation reading on contact.</p> <p>Δ denotes static location.</p>		
Routine (Daily / Weekly / Monthly)			(Non-routine)			

Radiation and Contamination Surveys

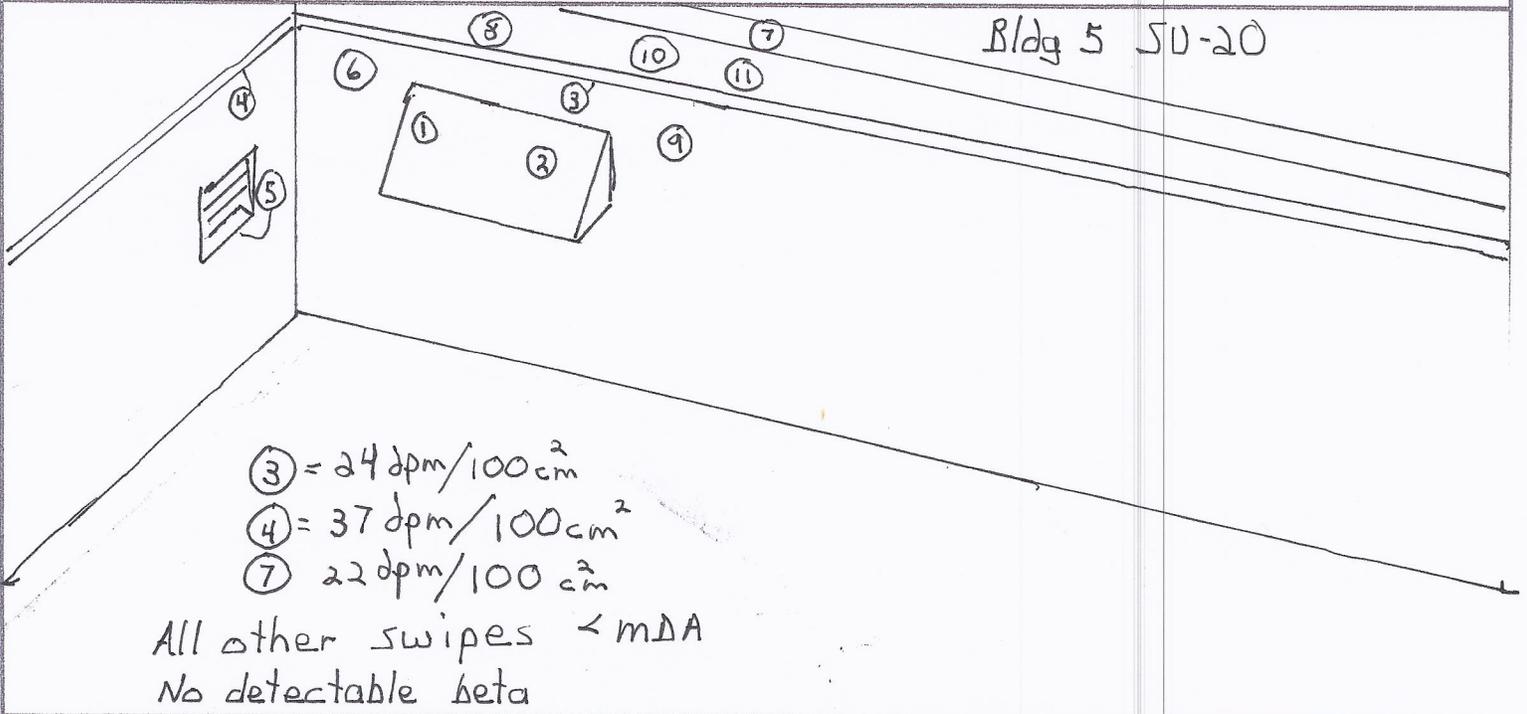
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ATTACHMENT 1 – RADIATION/CONTAMINATION SURVEY FORM

DATE: 12-1-10	TIME: 1730	INSTRUMENTATION USED				
SURVEY NUMBER: AP - 098 - 10	Model Inst/Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	Background (dpm/100cm ²)
LOCATION: Bldg 5 su-20	2929	163817	2-3-11	40.9 32.1	13 82	0.5 cpm 48 cpm
SURVEYOR: James Kirby						
REVIEWED BY: <i>[Signature]</i>						
PHP/SPM: <i>R.W. Duhil</i>						

Isotopes of Concern:

Description or drawing:



Area posted in accordance with SOP 010
Caution ACA CA RWP required

Routine (Daily / Weekly / Monthly)

[Signature]

Non-routine

All radiation readings in $\mu\text{r/hr}$ unless otherwise noted.

- ①denotes swipe location or fixed α/β readings.
- #denotes G/A radiation readings.
- #/#denotes contact / 1 meter radiation readings.
- *denotes highest radiation reading on contact.
- Δ denotes static location.

Radiation and Contamination Surveys

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ATTACHMENT 1 - RADIATION/CONTAMINATION SURVEY FORM

DATE: 12-3-10		TIME: 1400		INSTRUMENTATION USED			
SURVEY NUMBER: AP-110-10		Model Inst/Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	Background (dpm/100cm ²)
LOCATION: 5U20 & 21		2221	180191	2-15-10	9	NA	0cpm
SURVEYOR: James Kirby		2929	163817	2-3-10	α 40.9 β 32.1	α 13 β 82	α 0.4 cpm β 48 cpm
REVIEWED BY: <i>[Signature]</i>							
PHP/SPM: R.W. Duhal							

Isotopes of Concern: Ra 226

Description or drawing: Investigational survey of overhead bldg 5 5U20 & 21

65 disc smears taken in overhead.
activity ranges from 20 to 45 dpm/100cm²

LAS from 30 to 80 ncpm

All entrances posted "Authorization required for entry"
and "Contact Millennium services for entry into overhead"
Paint chip from window sill in 5U21 was 14cpm

[Signature] 12-3-10

Routine (Daily / Weekly / Monthly)

Non-routine

All radiation readings in µr/hr unless otherwise noted.
 # ...denotes swipe location or fixed α/β readings.
 #.....denotes G/A radiation readings.
 #/#...denotes contact / 1 meter radiation readings.
 *.....denotes highest radiation reading on contact.
 Δ.....denotes static location.

Radiation and Contamination Surveys

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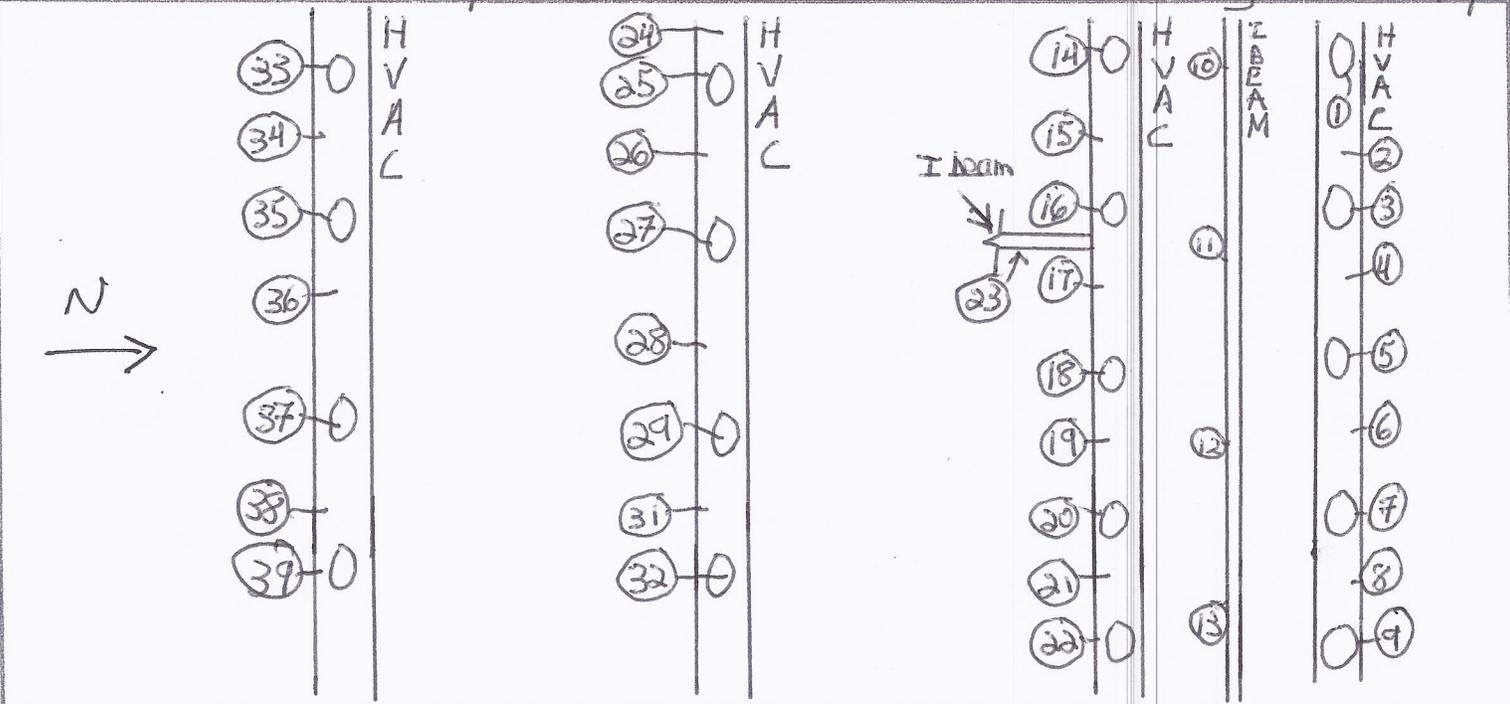
Page 1 of 3

ATTACHMENT 1 - RADIATION/CONTAMINATION SURVEY FORM

DATE: 12-20-10	TIME: 1330	INSTRUMENTATION USED				
SURVEY NUMBER: AP-148-10	Model Inst/Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	Background (dpm/100cm ²)
LOCATION: Building 5	2221	183194	2-15-10	10	NA	1cpm
SURVEYOR: James Kirby						
REVIEWED BY: <i>Paula</i>						
PHP/SPM: R.W. Dublin						

Isotopes of Concern: Ra 226

Description or drawing: Survey of exhaust ventilation Building 5 Inst. shop



<p>Routine (Daily / Weekly / Monthly)</p> <p style="text-align: center;">Non-routine</p>	<p>All radiation readings in $\mu\text{r/hr}$ unless otherwise noted.</p> <p># denotes swipe location or fixed α/β readings.</p> <p># denotes G/A radiation readings.</p> <p># / # denotes contact / 1 meter radiation readings.</p> <p>* denotes highest radiation reading on contact.</p> <p>Δ denotes static location.</p>
---	--

Radiation and Contamination Surveys

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ATTACHMENT 2 - RADIATION/CONTAMINATION SURVEY SUPPLEMENT

SURVEY NUMBER: <i>AP-148-10</i>		SURVEYOR: <i>James Kirby</i>		LOCATION: <i>Building 5 Instrument shop</i>				
Location	Exposure Rate (µR/hr)		Fixed + Removable			cpm/PA Removable		Comments
	Contact	1 Meter	Gamma (cpm)	Alpha dpm/probe	Beta/Gamma dpm/probe	Alpha dpm/100cm ²	Beta/Gamma dpm/100cm ²	
1				7.5		NDA		
2				9.5		5		
3				8		NDA		
4				9.5		NDA		
5				8		NDA		
6				10		6		
7				5.5		NDA		
8				43.5		10		
9				7.5		NDA		
10				NDA		NDA		
11				NDA		NDA		
12				NDA		NDA		
13				NDA		NDA		
14				15		3.5		
15				12		NDA		
16				7.5		NDA		
17				13		NDA		
18				9		NDA		
19				8.5		NDA		
20				8.5		NDA		
21				8		NDA		
22				12.5		NDA		
23				9.5		NDA		
24				4.5		NDA		
25				3		NDA		
Reviewer: <i>[Signature]</i>		Date/Time: <i>12/20/10 1400</i>		PHP/SPM: <i>R.W. Dabiel</i>		Date/Time: <i>12/20/10 1500</i>		

Radiation and Contamination Surveys

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ATTACHMENT 2 - RADIATION/CONTAMINATION SURVEY SUPPLEMENT

SURVEY NUMBER: <i>AP-148-10</i>		SURVEYOR: <i>James Kirby</i>		LOCATION: <i>Building 5 Instrument shop</i>				
Location	Exposure Rate ($\mu\text{R/hr}$)		Fixed + Removable			Removable		Comments
	Contact	1 Meter	Gamma (cpm)	Alpha dpm/probe	Beta/Gamma dpm/probe	Alpha dpm/100cm ²	Beta/Gamma dpm/100cm ²	
1	26			4		NDA		
2	27			4.5		NDA		
3	28			24		NDA		
4	29			4		NDA		
5	30			4.5		NDA		
6	31			11		NDA		
7	32			7.5		NDA		
8	33			10.5		NDA		
9	34			3.5		NDA		
10	35			11.5		NDA		
11	36			6.5		NDA		
12	37			6		NDA		
13	38			4		NDA		
14	39			4		NDA		
15	40							
16	41							
17	42							
18	43							
19	44							
20	45							
21	46							
22	47							
23	48							
24	49							
25	50							
Reviewer: <i>[Signature]</i>		Date/Time: <i>10/20/10 1400</i>		PHP/SPM: <i>R.W. Dubeil</i>		Date/Time: <i>12/20/10 1500</i>		

Alameda Smear / Direct Survey Form

Building:	5	Survey Unit:	58
Instrument Model Number:	2221	Serial Number:	190181
Instrument Model Number:	2929	Serial Number:	163817
Survey Type (Circle One):	<input checked="" type="radio"/> Alpha <input type="radio"/> Beta		

FOLLOW-UP SURVEY
 BLDG 5 SU-58
STRIP#S

- 1) 54
- 2) 362
- 3) 374
- 4) 608
- 5) 638
- 6) 670

#3 - Strip 374 removable contamination

MDA : 12 dpm / 100cm²

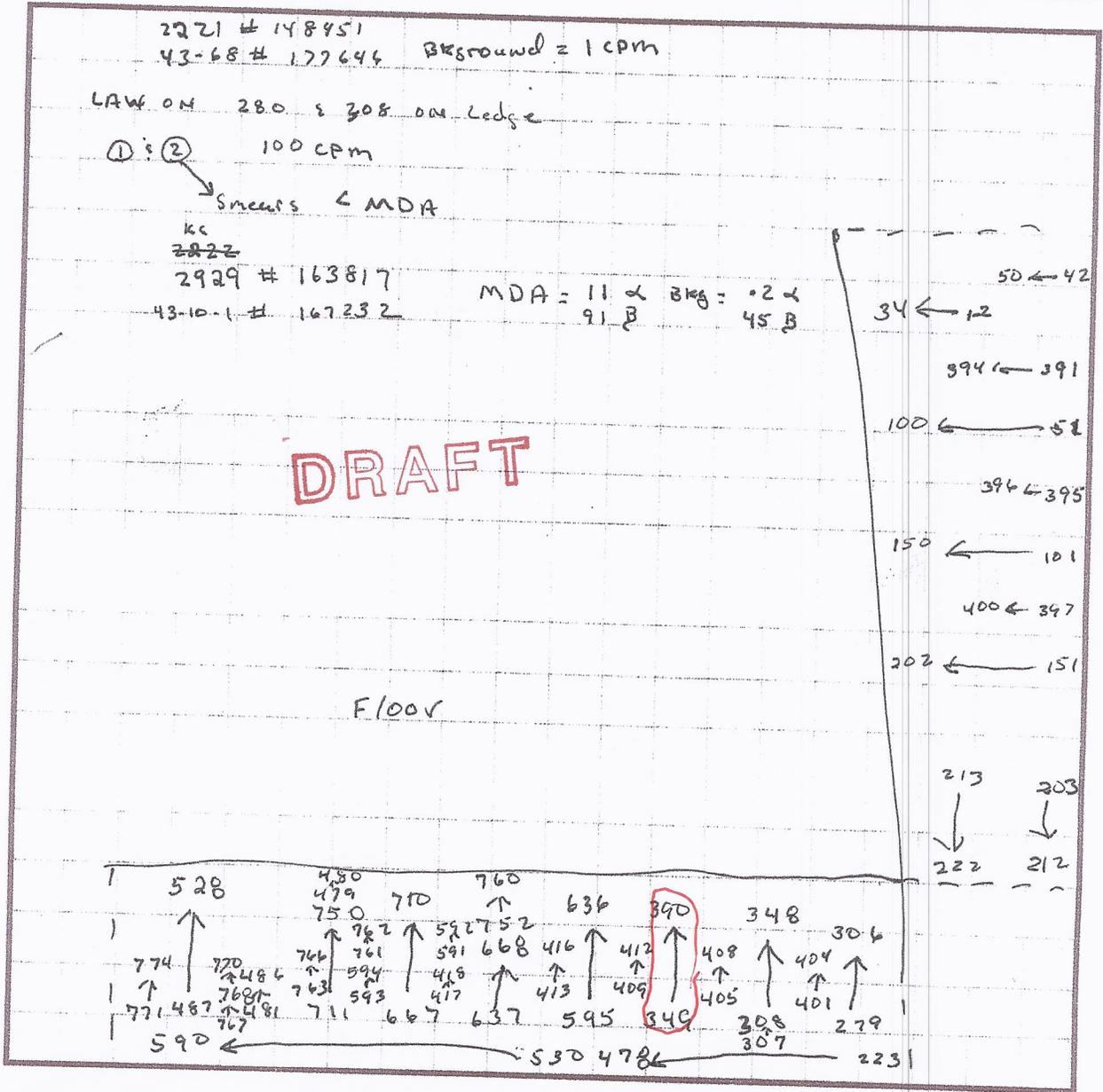
#	Surface	Material Type	SMEAR (CPM)	(CPM)	#	Surface	Material Type	SMEAR (CPM)	(CPM)
1	WALL	5	<MDA	4	7	Z	N/A		
2	WALL	5	<MDA	22	8				
3	WALL	5	32	45	9				
4	WALL	5	7	46	10				
5	WALL	5	<MDA	33	11				
6	WALL	5	<MDA	98	12				

Type	Material	Type	Material	Type	Material	Type	Material
1	Asphalt	2	Cinder Block	3	Concrete	4	Drywall
5	Steel	6	Wood	7	Glass		

Data Review	Name	Date	Signature
Operator	EULON PATRICK	3-3-11	Eulon Patrick
Operator			
Data Processor	J.T. Cohn	3-3-11	J.T. Cohn
Project Mgr.	R.W. Dubiel	3-3-11	R.W. Dubiel

Alameda SCM Survey Form

Survey File Name:	FA5821 A		
Building:	5	Survey Unit:	SU 26 ^{cc} 58
SCM Number:	9	Detector Type (Circle One):	<u>C90</u> C180 T90 T120 T180
Surface (Circle One):	Floors	Walls < 6'	<u>Walls > 6'</u> Ceiling
Material Type (Circle One):	Asphalt	Cinder Block	Concrete
	Drywall	<u>Steel</u>	<u>Glass</u> Wood
Survey Type (Circle One):	<u>Alpha</u> Beta		



Data Review	Name	Date	Signature
Operator	Ken Cordova	3/3/11	<i>Ken Cordova</i>
Operator	BRANDON THROWER	3-3-11	<i>Brandon Thrower</i>
Data Processor	JEFF VASSETT	3-3-11	<i>Jeff Vasset</i>
Project Mgr.	R.W. Dubiel	3-3-11	<i>R.W. Dubiel</i>

Survey Report

Survey File Name:	FA5821A
Survey Date:	March 2, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	293 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.14 m ²

This survey is not position correlated.

Primary Detector:

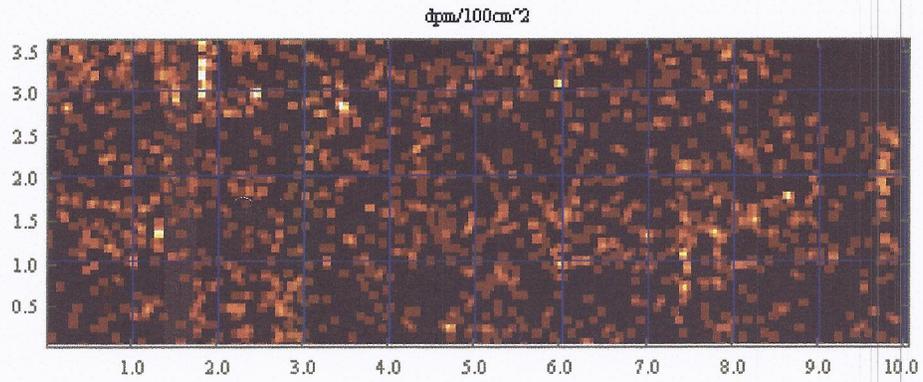


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

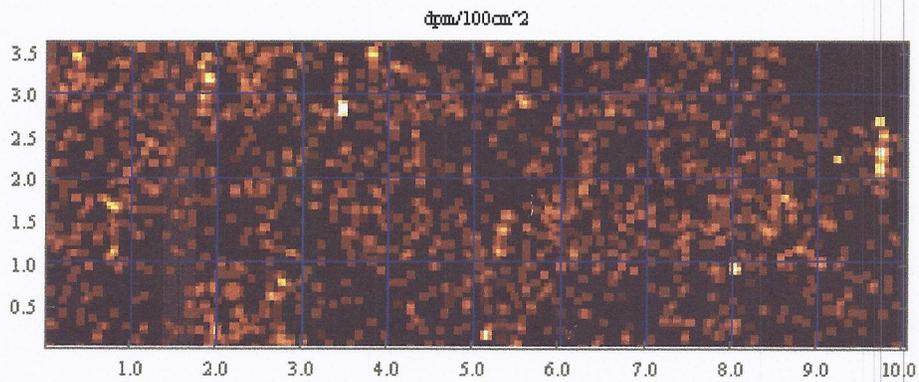


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

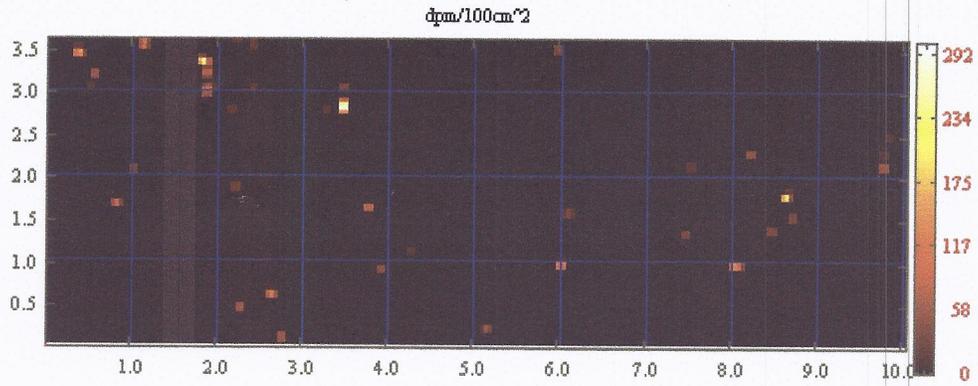


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

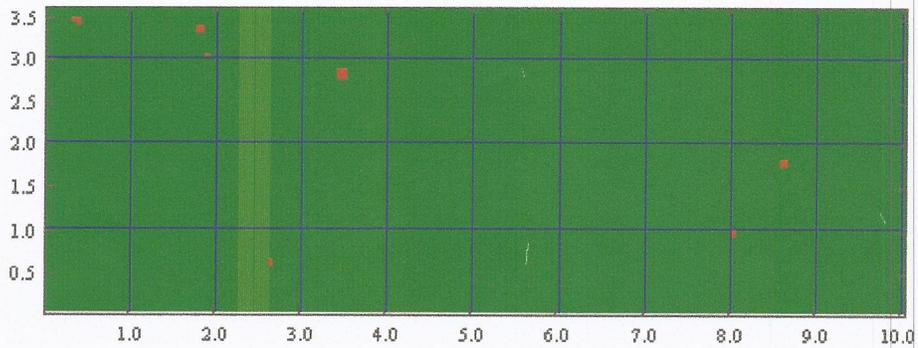


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	293	670	(345,280)	(0,5)	N/A		98
Spot	254	638	(185,335)	(0,60)	N/A		33
Spot	215	274 ✓	(865,180)	(0,85)	N/A		45
Spot	155	608 ✓	(40,345)	(5,70)	N/A		46
Spot	134	362 ✓	(805,95)	(0,0)	N/A		22
Spot	130	54	(265,65)	(0,60)	N/A		4
Spot	117	638	(190,300)	(5,25)	N/A		

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Meter
190181

APPENDIX I
TRITIUM SMEAR ANALYTICAL RESULTS (ON CD)

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. CTO 0025

Alameda

Lot #: F1B140407

Lawson Bailey

Tetra Tech NUS Inc
900 Trail Ridge Road
Aiken, SC 29803

TESTAMERICA LABORATORIES, INC.



Erika Starman
Project Manager

March 10, 2011

Case Narrative
LOT NUMBER: F1B140407

This report contains the analytical results for the 18 samples received under chain of custody by TestAmerica St. Louis on February 10, 2011. These samples are associated with your Alameda project.

The analytical results included in this report meet all applicable quality control procedure requirements.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689.** The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

There were no nonconformances or observations noted with any analysis on this lot.

METHODS SUMMARY

F1B140407

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
H-3 by Distillation & LSC	EPA 906.0 MOD	

References:

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F1B140407

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MEDX4	001	005-SWI-022	02/07/11	13:30
MEDX9	002	005-SWI-023	02/07/11	13:30
MED0A	003	005-SWI-024	02/07/11	13:30
MED0D	004	005-SWI-025	02/07/11	13:31
MED0F	005	005-SWI-026	02/07/11	13:31
MED0G	006	005-SWI-027	02/07/11	13:31
MED0K	007	005-SWI-028	02/07/11	13:31
MED0L	008	005-SWI-029	02/07/11	13:32
MED0M	009	005-SWI-030	02/07/11	13:32
MED0Q	010	005-SWI-031	02/07/11	13:32
MED0R	011	005-SWI-032	02/07/11	13:32
MED00	012	005-SWI-033	02/07/11	13:33
MED01	013	005-SWI-034	02/07/11	13:33
MED02	014	005-SWI-035	02/07/11	13:34
MED03	015	005-SWI-036	02/07/11	13:34
MED04	016	005-SWI-037	02/07/11	13:35
MED05	017	005-SWI-038	02/07/11	13:35
MED08	018	005-SWI-039	02/07/11	13:35

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-022

Radiochemistry

Lab Sample ID: F1B140407-001
 Work Order: MEDX4
 Matrix: SOLID

Date Collected: 02/07/11 1330
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	25		20	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-023

Radiochemistry

Lab Sample ID: F1B140407-002
 Work Order: MEDX9
 Matrix: SOLID

Date Collected: 02/07/11 1330
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	3	U	18	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-024

Radiochemistry

Lab Sample ID: F1B140407-003
 Work Order: MED0A
 Matrix: SOLID

Date Collected: 02/07/11 1330
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	1	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-025

Radiochemistry

Lab Sample ID: F1B140407-004
 Work Order: MEDOD
 Matrix: SOLID

Date Collected: 02/07/11 1331
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-3	U	18	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-026

Radiochemistry

Lab Sample ID: F1B140407-005
 Work Order: MEDOF
 Matrix: SOLID

Date Collected: 02/07/11 1331
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	11	U	19	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-027

Radiochemistry

Lab Sample ID: F1B140407-006
 Work Order: MEDOG
 Matrix: SOLID

Date Collected: 02/07/11 1331
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	-9	U	17	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-028

Radiochemistry

Lab Sample ID: F1B140407-007
 Work Order: MEDOK
 Matrix: SOLID

Date Collected: 02/07/11 1331
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-1	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-029

Radiochemistry

Lab Sample ID: F1B140407-008
 Work Order: MEDOL
 Matrix: SOLID

Date Collected: 02/07/11 1332
 Date Received: 02/10/11 1045

Parameter	Result	Qual.	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	-7	U	17	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-030

Radiochemistry

Lab Sample ID: F1B140407-009
 Work Order: MEDOM
 Matrix: SOLID

Date Collected: 02/07/11 1332
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	2	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-031

Radiochemistry

Lab Sample ID: F1B140407-010
 Work Order: MEDOQ
 Matrix: SOLID

Date Collected: 02/07/11 1332
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD					dpm/sample	Batch # 1055028		Yld %
Tritium	8	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-032

Radiochemistry

Lab Sample ID: F1B140407-011
 Work Order: MEDOR
 Matrix: SOLID

Date Collected: 02/07/11 1332
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	-4	U	17	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-033

Radiochemistry

Lab Sample ID: F1B140407-012
 Work Order: MED00
 Matrix: SOLID

Date Collected: 02/07/11 1333
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	1	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-034

Radiochemistry

Lab Sample ID: F1B140407-013
 Work Order: MED01
 Matrix: SOLID

Date Collected: 02/07/11 1333
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	8	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-035

Radiochemistry

Lab Sample ID: F1B140407-014
 Work Order: MED02
 Matrix: SOLID

Date Collected: 02/07/11 1334
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	6	U	18	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-036

Radiochemistry

Lab Sample ID: F1B140407-015
 Work Order: MED03
 Matrix: SOLID

Date Collected: 02/07/11 1334
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	4	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-037

Radiochemistry

Lab Sample ID: F1B140407-016
 Work Order: MED04
 Matrix: SOLID

Date Collected: 02/07/11 1335
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	-0.6	U	18	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-038

Radiochemistry

Lab Sample ID: F1B140407-017
 Work Order: MED05
 Matrix: SOLID

Date Collected: 02/07/11 1335
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	-0.6	U	18	1000	15	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-039

Radiochemistry

Lab Sample ID: F1B140407-018
 Work Order: MED08
 Matrix: SOLID

Date Collected: 02/07/11 1335
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055028		Yld %
Tritium	-2	U	18	1000	15	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F1B140407
 Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Lab Sample ID
			dpm/sam ple					Batch #
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	10	U	19	1000	15	30	02/23/11	F1B240000-028B 02/25/11

NOTE(S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection". Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F1B140407

Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	% Yld	% Rec	Lab Sample ID	
						QC Control Limits	Precision
TRITIUM (Distill) by EPA 906.0 MOD			dpm/samp	906.0 MOD		F1B240000-028C	
Tritium	950	927	76		98	(75 - 104)	
Spk 2	950	925	76		97	(75 - 104)	
	Batch #:	1055028			Analysis Date:	02/25/11	

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

F1B140407

CLIENT ANALYSIS SUMMARY

TestAmerica St. Louis

Storage Loc: SC

Project Manager: EKS Quote #: 87968 SDG:
Project: 1068373 Alameda
PO#: 1068373 Report to: Lawson Bailey
Client: 375241 Tetra Tech NUS, Inc

Date Received: 2011-02-10
Analytical Due Date: 2011-03-07
Report Due Date: 2011-03-10
Report Type: X
EDD Code: 00

#SMPS in LOT: 0

Follow DOD QSM 4.1

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
1 005-SWI-022 2011-02-07 / 1330 MEDX4 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
2 005-SWI-023 2011-02-07 / 1330 MEDX9 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
3 005-SWI-024 2011-02-07 / 1330 MED0A SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
4 005-SWI-025 2011-02-07 / 1331 MED0D SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
5 005-SWI-026 2011-02-07 / 1331 MED0F SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
6 005-SWI-027 2011-02-07 / 1331 MED0G SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
7 005-SWI-028 2011-02-07 / 1331 MED0K SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
8 005-SWI-029 2011-02-07 / 1332 MED0L SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
9 005-SWI-030 2011-02-07 / 1332 MED0M SOLID

SAMPLE COMMENTS:

F1B140407

CLIENT ANALYSIS SUMMARY

Storage Loc: SC
 Date Received: 2011-02-10
 Analytical Due Date: 2011-03-07
 Report Due Date: 2011-03-10
 Report Type: X
 EDD Code: 00

Project Manager: EKS Quote #: 87968 SDG:
 Project: 1068373 Alameda
 PO#: 1068373 Report to: Lawson Bailey
 Client: 375241 Tetra Tech NUS, Inc

#SMPS in LOT: 0

Follow DOD QSM 4.1

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 10 005-SWI-031 2011-02-07 / 1332 MED0Q SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 11 005-SWI-032 2011-02-07 / 1332 MED0R SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 12 005-SWI-033 2011-02-07 / 1333 MED00 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 13 005-SWI-034 2011-02-07 / 1333 MED01 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 14 005-SWI-035 2011-02-07 / 1334 MED02 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 15 005-SWI-036 2011-02-07 / 1334 MED03 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 16 005-SWI-037 2011-02-07 / 1335 MED04 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 17 005-SWI-038 2011-02-07 / 1335 MED05 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOG 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A

F1B140407

CLIENT ANALYSIS SUMMARY

TestAmerica St. Louis

Project Manager: EKS
Project: 1068373
PO#: 1068373
Client: 375241

Quote #: 87968 SDG:
Alameda
Report to: Lawson Bailey
Tetra Tech NUS, Inc

#SMPS In LOT: 0

Storage Loc: SC
Date Received: 2011-02-10
Analytical Due Date: 2011-03-07
Report Due Date: 2011-03-10
Report Type: X
EDD Code: 00

Follow DOD QSM 4.1

18 005-SWI-039 2011-02-07 / 1335 MED08 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM G8 Distillation and Suspended In LSC 01 STANDARD TEST SET PROT: A WRK 06
MOD (Dist) swipes Cocktail LOC

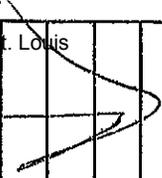
TestAmerica St. Louis Chain-of-Custody Record

13715 Rider Trail North
 Earth City, MO 63045
 Phone: 314-298-8566 Fax: 314-298-8757

CUR 74

Customer Information				Project Information				Analyses / Method Requested										
Project Name	Alameda Point	Purchase Order	1069373	A. Tritium analysis														
PM/ Quote#		Work Order		B.														
Company	Tetrattech	Bill To		C.														
Send Report To:	Lawson Bailly	Invoice Attn		D.														
Address:	900 Trail Ridge Rd	Address:		E.														
City/State/Zip	Aiken, SC 29803	City/State/Zip		F.														
Phone	803-641-6326	Phone		G.														
Fax		Fax		H.														
Sx No.	Sample Description	Sample Date	Sample Time	Sample Matrix	Container Type	Preservative	No. of Bottles	A	B	C	D	E	F	G	H	I	Comments	
1	005-SWI-022	2/7/2011	1330	H ³ Swipe	Zip loc			X									SU 61 FLOORS IN BAG	
2	005-SWI-023	2/7/2011	1330	H ³ Swipe	Zip loc			X										
3	005-SWI-024	2/7/2011	1330	H ³ Swipe	Zip loc			X										
4	005-SWI-025	2/7/2011	1331	H ³ Swipe	Zip loc			X										
5	005-SWI-026	2/7/2011	1331	H ³ Swipe	Zip loc			X										
6	005-SWI-027	2/7/2011	1331	H ³ Swipe	Zip loc			X										
7	005-SWI-028	2/7/2011	1331	H ³ Swipe	Zip loc			X										
8	005-SWI-029	2/7/2011	1332	H ³ Swipe	Zip loc			X										
9	005-SWI-030	2/7/2011	1332	H ³ Swipe	Zip loc			X										
10	005-SWI-031	2/7/2011	1332	H ³ Swipe	Zip loc			X										
11	005-SWI-032	2/7/2011	1333	H ³ Swipe	Zip loc			X										
12	005-SWI-033	2/7/2011	1333	H ³ Swipe	Zip loc			X										
13	005-SWI-034	2/7/2011	1333	H ³ Swipe	Zip loc			X										
14	005-SWI-035	2/7/2011	1334	H ³ Swipe	Zip loc			X										
15	005-SWI-036	2/7/2011	1334	H ³ Swipe	Zip loc			X										
16	005-SWI-037	2/7/2011	1335	H ³ Swipe	Zip loc			X										
17	005-SWI-038	2/7/2011	1335	H ³ Swipe	Zip loc			X										
18	005-SWI-039	2/7/2011	1335	H ³ Swipe	Zip loc			X										

TestAmerica St. Louis



Shipment Method: FED EX		Airbill No.: 8741 5839 8076	Required Turnaround: 21 days
Relinquished by: <i>[Signature]</i>	Date: 2/8/11	Relinquished by:	Date
Company Name: MSI	Time:	Company Name:	Time
Received by: <i>[Signature]</i>	Date: 2/10/11	Received by:	Date
Company Name: <i>[Signature]</i>	Time: 1045	Company Name:	Time

Lot #(s) F1B140 407 423 TestAmerica St. Louis
412 487
410 433
418 438
421 435

CONDITION UPON RECEIPT FORM

Client: MILLINSTEAM SERVICES

Quote No: 87968

COC/RFA No: N/A

Initiated By: NVO

Date: ⁴⁷⁴ 2-10-11

Time: 1045

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages: Y N

Shipping # (s):*	Sample Temperature (s):**
1. <u>8741 5839 8076</u>	1. <u>Ambient</u>
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8. <input type="radio"/> Y <input checked="" type="radio"/> N	Are there custody seals present on bottles?
2. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?	11. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
5. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was pH taken by original TestAmerica lab?

¹ For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

SAMPLE ID'S 497-SWI-113, 114 & 115 - 000 2/10/11

Corrective Action:

Client Contact Name: _____

Informed by: _____

Sample(s) processed "as is"

Sample(s) on hold until: _____

If released, notify: _____

Project Management Review: ajs

Date: 2/15/11

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004, REVISED 10/21/08 \SISvr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004 rev11.doc

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. CTO 0025

Alameda

Lot #: F1B140412

Lawson Bailey

Tetra Tech NUS Inc
900 Trail Ridge Road
Aiken, SC 29803

TESTAMERICA LABORATORIES, INC.



Erika Starman
Project Manager

March 10, 2011

Case Narrative
LOT NUMBER: F1B140412

This report contains the analytical results for the 17 samples received under chain of custody by TestAmerica St. Louis on February 10, 2011. These samples are associated with your Alameda project.

The analytical results included in this report meet all applicable quality control procedure requirements.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689.** The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

There were no nonconformances or observations noted with any analysis on this lot.

METHODS SUMMARY

F1B140412

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
H-3 by Distillation & LSC	EPA 906.0 MOD	

References:

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F1B140412

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MED1P	001	005-SWI-040	02/08/11	07:45
MED1R	002	005-SWI-041	02/08/11	07:45
MED1T	003	005-SWI-042	02/08/11	07:45
MED1V	004	005-SWI-043	02/08/11	07:46
MED1W	005	005-SWI-044	02/08/11	07:46
MED1X	006	005-SWI-045	02/08/11	07:46
MED10	007	005-SWI-046	02/08/11	07:47
MED11	008	005-SWI-047	02/08/11	07:47
MED12	009	005-SWI-048	02/08/11	07:48
MED13	010	005-SWI-049	02/08/11	07:48
MED15	011	005-SWI-050	02/08/11	07:48
MED16	012	005-SWI-051	02/08/11	07:49
MED17	013	005-SWI-052	02/08/11	07:49
MED18	014	005-SWI-053	02/08/11	07:49
MED19	015	005-SWI-054	02/08/11	07:50
MED2C	016	005-SWI-055	02/08/11	07:50
MED2D	017	005-SWI-056	02/08/11	07:50

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-040

Radiochemistry

Lab Sample ID: F1B140412-001
 Work Order: MED1P
 Matrix: SOLID

Date Collected: 02/08/11 0745
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-12	U	19	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-041

Radiochemistry

Lab Sample ID: F1B140412-002
 Work Order: MED1R
 Matrix: SOLID

Date Collected: 02/08/11 0745
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	-6	U	19	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-042

Radiochemistry

Lab Sample ID: F1B140412-003
 Work Order: MED1T
 Matrix: SOLID

Date Collected: 02/08/11 0745
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	15	U	20	1000	16	30	02/23/11	02/24/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-043

Radiochemistry

Lab Sample ID: F1B140412-004
 Work Order: MED1V
 Matrix: SOLID

Date Collected: 02/08/11 0746
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	10	U	20	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-044

Radiochemistry

Lab Sample ID: F1B140412-005
 Work Order: MED1W
 Matrix: SOLID

Date Collected: 02/08/11 0746
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	1	U	20	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-045

Radiochemistry

Lab Sample ID: F1B140412-006
 Work Order: MED1X
 Matrix: SOLID

Date Collected: 02/08/11 0746
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-17	U	18	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-046

Radiochemistry

Lab Sample ID: F1B140412-007
 Work Order: MED10
 Matrix: SOLID

Date Collected: 02/08/11 0747
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	10	U	20	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-047

Radiochemistry

Lab Sample ID: F1B140412-008
 Work Order: MED11
 Matrix: SOLID

Date Collected: 02/08/11 0747
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-6	U	19	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-048

Radiochemistry

Lab Sample ID: F1B140412-009
 Work Order: MED12
 Matrix: SOLID

Date Collected: 02/08/11 0748
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	-17	U	19	1000	16	30	02/23/11	02/24/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-049

Radiochemistry

Lab Sample ID: F1B140412-010
 Work Order: MED13
 Matrix: SOLID

Date Collected: 02/08/11 0748
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	-7	U	19	1000	16	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-050

Radiochemistry

Lab Sample ID: F1B140412-011
 Work Order: MED15
 Matrix: SOLID

Date Collected: 02/08/11 0748
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-7	U	19	1000	16	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-051

Radiochemistry

Lab Sample ID: F1B140412-012
 Work Order: MED16
 Matrix: SOLID

Date Collected: 02/08/11 0749
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-7	U	19	1000	16	30	02/23/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-052

Radiochemistry

Lab Sample ID: F1B140412-013
 Work Order: MED17
 Matrix: SOLID

Date Collected: 02/08/11 0749
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	-9	U	19	1000	16	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-053

Radiochemistry

Lab Sample ID: F1B140412-014
 Work Order: MED18
 Matrix: SOLID

Date Collected: 02/08/11 0749
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	-3	U	19	1000	16	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-054

Radiochemistry

Lab Sample ID: F1B140412-015
 Work Order: MED19
 Matrix: SOLID

Date Collected: 02/08/11 0750
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-10	U	19	1000	16	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-055

Radiochemistry

Lab Sample ID: F1B140412-016
 Work Order: MED2C
 Matrix: SOLID

Date Collected: 02/08/11 0750
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055059		Yld %
Tritium	-21	U	18	1000	16	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-056

Radiochemistry

Lab Sample ID: F1B140412-017
 Work Order: MED2D
 Matrix: SOLID

Date Collected: 02/08/11 0750
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-21	U	18	1000	16	30	02/23/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F1B140412
 Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Lab Sample ID Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
			dpm/sam ple	Batch #	1055059	Yld %		F1B240000-059B
Tritium	1	U	19	1000	16	30	02/23/11	02/24/11

NOTE (S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214. F1B140412

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F1B140412
 Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	% Yld	% Rec	Lab Sample ID	
						QC Control Limits	Precision
TRITIUM (Distill) by EPA 906.0 MOD			dpm/samp	906.0 MOD		F1B240000-059C	
Tritium	950	963	79		101	(75 - 104)	
	Spk 2 950	869	73		91	(75 - 104)	
	Batch #:	1055059			Analysis Date:	02/24/11	

NOTE (S)

Calculations are performed before rounding to avoid round-off error in calculated results

F1B140412

CLIENT ANALYSIS SUMMARY

Storage Loc: **SC**
 Date Received: 2011-02-10
 Analytical Due Date: 2011-03-07
 Report Due Date: 2011-03-10
 Report Type: X
 EDD Code: 00

Project Manager: EKS Quote #: 87968 SDG:
 Project: 1068373 Alameda
 PO#: 1068373 Report to: Lawson Bailey
 Client: 375241 Tetra Tech NUS, Inc

#SMPS In LOT: 0

Follow DOD GSM 4.1

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>Site ID</u>	<u>Client Matrix</u>	<u>DATE/TIME SAMPLED</u>	<u>WORKORDER</u>	<u>A</u>
1	005-SWI-040			2011-02-08 / 745	MED1P	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
2	005-SWI-041			2011-02-08 / 745	MED1R	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
3	005-SWI-042			2011-02-08 / 745	MED1T	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
4	005-SWI-043			2011-02-08 / 746	MED1V	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
5	005-SWI-044			2011-02-08 / 746	MED1W	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
6	005-SWI-045			2011-02-08 / 746	MED1X	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
7	005-SWI-046			2011-02-08 / 747	MED10	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
8	005-SWI-047			2011-02-08 / 747	MED11	SOLID
<u>SAMPLE COMMENTS:</u>						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET
					PROT: A	WRK 06 LOC
9	005-SWI-048			2011-02-08 / 748	MED12	SOLID
<u>SAMPLE COMMENTS:</u>						

F1B140412

CLIENT ANALYSIS SUMMARY

Storage Loc: SC
 Date Received: 2011-02-10
 Analytical Due Date: 2011-03-07
 Report Due Date: 2011-03-10
 Report Type: X
 EDD Code: 00

Project Manager: EKS Quote #: 87968 SDG:
 Project: 1068373 Alameda
 PO#: 1068373 Report to: Lawson Bailey
 Client: 375241 Tetra Tech NUS, Inc

#SMPS in LOT: 0

Follow DOD QSM 4.1

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 10 005-SWI-049 2011-02-08 / 748 MED13 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 11 005-SWI-050 2011-02-08 / 748 MED15 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 12 005-SWI-051 2011-02-08 / 749 MED16 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 13 005-SWI-052 2011-02-08 / 749 MED17 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 14 005-SWI-053 2011-02-08 / 749 MED18 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 15 005-SWI-054 2011-02-08 / 750 MED19 SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 16 005-SWI-055 2011-02-08 / 750 MED2C SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A
 17 005-SWI-056 2011-02-08 / 750 MED2D SOLID

SAMPLE COMMENTS:

XX ZC EPA 906.0 MOD SOLID, 906.0 MOD, TRITIUM (Dist) swipes G8 Distillation and Suspended in LSC Cocktail 01 STANDARD TEST SET PROT: A WRK LOC 06

TestAmerica St. Louis Chain-of-Custody Record

13715 Rider Trial North
 Earth City, MO 63045
 Phone: 314-298-8566 Fax: 314-298-8757

CWR 474

Customer Information				Project Information				Analyses/Method Requested									
Project Name	Alameda Point	Purchase Order	1068373	A. Tritium analysis													
PM/Quote#		Work Order		B.													
Company	Tetrattech	Bill To		C.													
Send Report To:	Lawson Baily	Invoice Attn		D.													
Address:	900 Trail Ridge Rd	Address:		E.													
City/State/Zip	Aiken, SC 29803	City/State/Zip		F.													
Phone	803-641-6326	Phone		G.													
Fax		Fax		H.													
				I.													
Sx No.	Sample Description	Sample Date	Sample Time	Sample Matrix	Container Type	Preservative	No. of Bottles	A	B	C	D	E	F	G	H	I	Comments
1	005-SWI-040	2/8/2011	0745	H ³ Swipe	Zip loc			X									SU 61
2	005-SWI-041	2/8/2011	0745	H ³ Swipe	Zip loc			X									
3	005-SWI-042	2/8/2011	0745	H ³ Swipe	Zip loc			X									
4	005-SWI-043	2/8/2011	0746	H ³ Swipe	Zip loc			X									
5	005-SWI-044	2/8/2011	0746	H ³ Swipe	Zip loc			X									
6	005-SWI-045	2/8/2011	0746	H ³ Swipe	Zip loc			X									
7	005-SWI-046	2/8/2011	0747	H ³ Swipe	Zip loc			X									
8	005-SWI-047	2/8/2011	0747	H ³ Swipe	Zip loc			X									
9	005-SWI-048	2/8/2011	0748	H ³ Swipe	Zip loc			X									
10	005-SWI-049	2/8/2011	0748	H ³ Swipe	Zip loc			X									
11	005-SWI-050	2/8/2011	0748	H ³ Swipe	Zip loc			X									
12	005-SWI-051	2/8/2011	0749	H ³ Swipe	Zip loc			X									
13	005-SWI-052	2/8/2011	0749	H ³ Swipe	Zip loc			X									
14	005-SWI-053	2/8/2011	0749	H ³ Swipe	Zip loc			X									
15	005-SWI-054	2/8/2011	0750	H ³ Swipe	Zip loc			X									
16	005-SWI-055	2/8/2011	0750	H ³ Swipe	Zip loc			X									
17	005-SWI-056	2/8/2011	0750	H ³ Swipe	Zip loc			X									

Shipment Method: FED EX		Airbill No.: 8741 5839 8076		Required Turnaround: 21 days	
Reinquished by: <i>[Signature]</i>	Date: 2/18/11	Reinquished by:	Date:	Reinquished by:	Date:
Company Name: MSI	Time:	Company Name:	Time:	Company Name:	Time:
Received by: <i>[Signature]</i>	Date: 2/18/11	Received by:	Date:	Received by:	Date:
Company Name: TA STL	Time: 1045	Company Name:	Time:	Company Name:	Time:

0



Lot #(s): F1B140 407, 423
412, 427
410, 433
418, 438
421, 435

CONDITION UPON RECEIPT FORM

Client: MILLIPAN SERVICES
 Quote No: 87968
 COC/RFA No: N/A

Initiated By: NVO Date: 2-10-11 Time: 1045

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages: Y N

Shipping # (s):* _____ Sample Temperature (s):** _____

1. <u>8741 5839 8076</u>	6. _____	1. <u>AMBIENT</u>	6. _____
2. _____	7. _____	2. _____	7. _____
3. _____	8. _____	3. _____	8. _____
4. _____	9. _____	4. _____	9. _____
5. _____	10. _____	5. _____	10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines **Sample must be received at 4°C ± 2°C. If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8. <input type="radio"/> Y <input checked="" type="radio"/> N	Are there custody seals present on bottles?
2. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?	11. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
5. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was pH taken by original TestAmerica lab?

For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

SAMPLE ID'S 497-SWI-113, 114 & 115 - 010 2/10/11

Corrective Action:

Client Contact Name: _____ Informed by: _____
 Sample(s) processed "as is"
 Sample(s) on hold until: _____ If released, notify: _____
 Project Management Review: ell Date: 2/15/11

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004, REVISED 10/21/08 WS\svr01\QA\FORMS\ST-LOUIS\ADMIN\Admin004 rev 11.doc



TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. CTO 0025

Alameda

Lot #: F1B140416

Lawson Bailey

Tetra Tech NUS Inc
900 Trail Ridge Road
Aiken, SC 29803

TESTAMERICA LABORATORIES, INC.



Erika Starnen
Project Manager

March 10, 2011

Case Narrative
LOT NUMBER: F1B140416

This report contains the analytical results for the 17 samples received under chain of custody by TestAmerica St. Louis on February 10, 2011. These samples are associated with your Alameda project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689.** The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

H-3 by Distillation & LSC (EPA 906.0 MOD)

Tritium batch includes a LCSD due to insufficient samples.

Affected Samples:

F1B140416 (1): 005-SWI-057
F1B140416 (2): 005-SWI-058
F1B140416 (3): 005-SWI-059
F1B140416 (4): 005-SWI-060
F1B140416 (5): 005-SWI-061
F1B140416 (6): 005-SWI-062
F1B140416 (7): 005-SWI-063
F1B140416 (8): 005-SWI-064
F1B140416 (9): 005-SWI-065
F1B140416 (10): 005-SWI-066
F1B140416 (11): 005-SWI-067
F1B140416 (12): 005-SWI-068
F1B140416 (13): 005-SWI-069
F1B140416 (14): 005-SWI-070
F1B140416 (15): 005-SWI-071
F1B140416 (16): 005-SWI-072
F1B140416 (17): 005-SWI-073

There were no other nonconformances or observations noted with any analysis on this lot.

METHODS SUMMARY

F1B140416

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
H-3 by Distillation & LSC	EPA 906.0 MOD	

References:

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL," US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F1B140416

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
MED2W	001	005-SWI-057	02/08/11	08:00
MED20	002	005-SWI-058	02/08/11	08:01
MED21	003	005-SWI-059	02/08/11	08:02
MED23	004	005-SWI-060	02/08/11	08:03
MED24	005	005-SWI-061	02/08/11	08:05
MED25	006	005-SWI-062	02/08/11	08:06
MED26	007	005-SWI-063	02/08/11	08:07
MED27	008	005-SWI-064	02/08/11	08:10
MED28	009	005-SWI-065	02/08/11	08:11
MED29	010	005-SWI-066	02/08/11	08:12
MED3A	011	005-SWI-067	02/08/11	08:13
MED3C	012	005-SWI-068	02/08/11	08:15
MED3D	013	005-SWI-069	02/08/11	08:16
MED3E	014	005-SWI-070	02/08/11	08:17
MED3F	015	005-SWI-071	02/08/11	08:18
MED3G	016	005-SWI-072	02/08/11	08:20
MED3J	017	005-SWI-073	02/08/11	08:21

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-057

Radiochemistry

Lab Sample ID: F1B140416-001
 Work Order: MED2W
 Matrix: SOLID

Date Collected: 02/08/11 0800
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-0.5	U	19	1000	16	30	02/24/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-058

Radiochemistry

Lab Sample ID: F1B140416-002
 Work Order: MED20
 Matrix: SOLID

Date Collected: 02/08/11 0801
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	10	U	20	1000	16	30	02/24/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-059

Radiochemistry

Lab Sample ID: F1B140416-003
 Work Order: MED21
 Matrix: SOLID

Date Collected: 02/08/11 0802
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	15	U	20	1000	16	30	02/24/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-060

Radiochemistry

Lab Sample ID: F1B140416-004
 Work Order: MED23
 Matrix: SOLID

Date Collected: 02/08/11 0803
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	20		21	1000	16	30	02/24/11	02/25/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-061

Radiochemistry

Lab Sample ID: F1B140416-005
 Work Order: MED24
 Matrix: SOLID

Date Collected: 02/08/11 0805
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	-1	U	19	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-062

Radiochemistry

Lab Sample ID: F1B140416-006
 Work Order: MED25
 Matrix: SOLID

Date Collected: 02/08/11 0806
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	4	U	20	1000	16	30	02/24/11	02/26/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-063

Radiochemistry

Lab Sample ID: F1B140416-007
 Work Order: MED26
 Matrix: SOLID

Date Collected: 02/08/11 0807
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	-15	U	18	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-064

Radiochemistry

Lab Sample ID: F1B140416-008
 Work Order: MED27
 Matrix: SOLID

Date Collected: 02/08/11 0810
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-19	U	18	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-065

Radiochemistry

Lab Sample ID: F1B140416-009
 Work Order: MED28
 Matrix: SOLID

Date Collected: 02/08/11 0811
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	-5	U	19	1000	16	30	02/24/11	02/26/11

NOTE (S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-066

Radiochemistry

Lab Sample ID: F1B140416-010
 Work Order: MED29
 Matrix: SOLID

Date Collected: 02/08/11 0812
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	-10	U	19	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-067

Radiochemistry

Lab Sample ID: F1B140416-011
 Work Order: MED3A
 Matrix: SOLID

Date Collected: 02/08/11 0813
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	-15	U	18	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-068

Radiochemistry

Lab Sample ID: F1B140416-012
 Work Order: MED3C
 Matrix: SOLID

Date Collected: 02/08/11 0815
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-5	U	19	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-069

Radiochemistry

Lab Sample ID: F1B140416-013
 Work Order: MED3D
 Matrix: SOLID

Date Collected: 02/08/11 0816
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	-9	U	19	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-070

Radiochemistry

Lab Sample ID: F1B140416-014
 Work Order: MED3E
 Matrix: SOLID

Date Collected: 02/08/11 0817
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-11	U	19	1000	16	30	02/24/11	02/26/11

NOTE (S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-071

Radiochemistry

Lab Sample ID: F1B140416-015
 Work Order: MED3F
 Matrix: SOLID

Date Collected: 02/08/11 0818
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
Tritium	-6	U	19	1000	16	30	02/24/11	02/26/11

NOTE (S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-072

Radiochemistry

Lab Sample ID: F1B140416-016
 Work Order: MED3G
 Matrix: SOLID

Date Collected: 02/08/11 0820
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				cpm/sample		Batch # 1055126		Yld %
Tritium	1	U	20	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Tetra Tech NUS, Inc

Client Sample ID: 005-SWI-073

Radiochemistry

Lab Sample ID: F1B140416-017
 Work Order: MED3J
 Matrix: SOLID

Date Collected: 02/08/11 0821
 Date Received: 02/10/11 1045

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD				dpm/sample		Batch # 1055126		Yld %
Tritium	2	U	19	1000	16	30	02/24/11	02/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F1B140416
 Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Lab Sample ID Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD								
			dpm/sample	Batch #	1055126	Yld %		F1B240000-126B
Tritium	-10	U	19	1000	16	30	02/24/11	02/25/11

NOTE (S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL.

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F1B140416

Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	% Yld	% Rec	QC Control Limits	Lab Sample ID Precision
TRITIUM (Distill) by EPA 906.0 MOD			dpm/samp	906.0 MOD			F1B240000-126C
Tritium	950	970	79		102	(75 - 104)	
Spk 2	950	912	76		96	(75 - 104)	6 %RPD
Batch #: 1055126			Analysis Date: 02/25/11				

NOTE(S)

Calculations are performed before rounding to avoid round-off error in calculated results

F1B140416

CLIENT ANALYSIS SUMMARY

Storage Loc: **SC**

Project Manager: EKS Quote #: 87968 SDG:
 Project: 1068373 Alameda
 PO#: 1068373 Report to: Lawson Bailey
 Client: 375241 Tetra Tech NUS, Inc

Date Received: 2011-02-10
 Analytical Due Date: 2011-03-07
 Report Due Date: 2011-03-10
 Report Type: X
 EDD Code: 00

#SMPS in LOT: 16

Follow DOD QSM 4.1

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
1	005-SWI-057			2011-02-08 / 800	MED2W	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
2	005-SWI-058			2011-02-08 / 801	MED20	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
3	005-SWI-059			2011-02-08 / 802	MED21	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
4	005-SWI-060			2011-02-08 / 803	MED23	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
5	005-SWI-061			2011-02-08 / 805	MED24	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
6	005-SWI-062			2011-02-08 / 806	MED25	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
7	005-SWI-063			2011-02-08 / 807	MED26	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
8	005-SWI-064			2011-02-08 / 810	MED27	SOLID
SAMPLE COMMENTS:						
XX	ZC	EPA 906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8 Distillation and Suspended in LSC Cocktail	01 STANDARD TEST SET	PROT: A WRK LOC 06
9	005-SWI-065			2011-02-08 / 811	MED28	SOLID
SAMPLE COMMENTS:						

F1B140416

CLIENT ANALYSIS SUMMARY

Storage Loc: **SC**

Project Manager: EKS Quote #: 87968 SDG:
 Project: 1068373 Alameda
 PO#: 1068373 Report to: Lawson Bailey
 Client: 375241 Tetra Tech NUS, Inc

Date Received: 2011-02-10
 Analytical Due Date: 2011-03-07
 Report Due Date: 2011-03-10
 Report Type: X
 EDD Code: 00

#SMPS In LOT: 16

Follow DOD GSM 4.1

XX	ZC	EPA	906.0 MOD	SOLID, 906.0 MOD, TRITIUM (Dist) swipes	G8	Distillation and Suspended in LSC Cocktail	01	STANDARD TEST SET	PROT: A	WRK LOC	06
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
10			005-SWI-066				2011-02-08 / 812		MED29	SOLID	
SAMPLE COMMENTS:											
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
11			005-SWI-067				2011-02-08 / 813		MED3A	SOLID	
SAMPLE COMMENTS:											
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
12			005-SWI-068				2011-02-08 / 815		MED3C	SOLID	
SAMPLE COMMENTS:											
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
13			005-SWI-069				2011-02-08 / 816		MED3D	SOLID	
SAMPLE COMMENTS:											
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
14			005-SWI-070				2011-02-08 / 817		MED3E	SOLID	
SAMPLE COMMENTS:											
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
15			005-SWI-071				2011-02-08 / 818		MED3F	SOLID	
SAMPLE COMMENTS:											
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
16			005-SWI-072				2011-02-08 / 820		MED3G	SOLID	
SAMPLE COMMENTS:											
SAMPLE # CLIENT SAMPLE ID Site ID Client Matrix DATE/TIME SAMPLED WORKORDER A											
17			005-SWI-073				2011-02-08 / 821		MED3J	SOLID	
SAMPLE COMMENTS:											

Relinquished by: <i>[Signature]</i>		Airbill No.: 8741 5839 8076		Required Turnaround: 21 days	
Company Name: MSI		Date: 2/8/11		Relinquished by:	
Received by: <i>[Signature]</i>		Time:		Company Name:	
Company Name: <i>[Signature]</i>		Date: 2/10/11		Received by:	
Company Name: <i>[Signature]</i>		Time: 1045		Company Name:	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F1B140 407, 423
412, 427
410, 433
418, 438
421, 435

CONDITION UPON RECEIPT FORM

Client: MILLINNAM SERVICES

Quote No: 87968

COC/RFA No: N/A

Initiated By: NVC

Date: 2-10-11

Time: 1045

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages: Y N

Shipping # (s):*	Sample Temperature (s):**
1. <u>8741 5839 8076</u>	1. <u>AUBERT</u>
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines **Sample must be received at 4°C ± 2°C. If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8. <input type="radio"/> Y <input checked="" type="radio"/> N	Are there custody seals present on bottles?
2. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?	11. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
5. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was pH taken by original TestAmerica lab?

¹ For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

SAMPLE ID'S 497-SWI-113, 114 & 115 - 000 2/10/11

Corrective Action:
 Client Contact Name: _____ Informed by: _____
 Sample(s) processed "as is"
 Sample(s) on hold until: _____ If released, notify: _____
 Project Management Review: gib Date: 2/15/11

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

APPENDIX J
SEDIMENT SAMPLING ANALYTICAL RESULTS (ON CD)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. CTO 0025

Alameda

Lot #: F1A100453

Lawson Bailey

Tetra Tech NUS Inc
900 Trail Ridge Road
Aiken, SC 29803

TESTAMERICA LABORATORIES, INC.



Erika Starman
Project Manager

February 17, 2011

Case Narrative
LOT NUMBER: F1A100453

This report contains the analytical results for the 14 samples received under chain of custody by TestAmerica St. Louis on January 10, 2011. These samples are associated with your Alameda project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689.** The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Due to limitations of the number of test codes available for use in the LIMS system there is only one code assigned for CWET analyses. All analyses in this report labeled with the SPLP designation refer to CA WET/STLC analyses.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Isotopic Uranium by Alpha Spectroscopy (EML A-01-R MOD)

The Uranium blank and LCS samples were switched. Samples were sent to re-extract to verify results and sample order. The re-extract results were acceptable and are reported.

Affected Samples:

F1A100453 (1): 44-SED-009
F1A100453 (2): 44-SED-010
F1A100453 (3): 44-SED-011
F1A100453 (4): 44-SED-012
F1A100453 (5): 346-SED-001
F1A100453 (14): 005-SED-001

Strontium 90 by GFPC (EPA 905 MOD)

The Strontium 90 sample duplicate %RPD > 40% and RER >1.0. Samples were re-extracted. The re-extract results were acceptable and are reported.

Affected Samples:

F1A100453 (9): 113-SED-014
F1A100453 (10): 113-SED-015
F1A100453 (11): 113-SED-015A
F1A100453 (12): 113-SED-016
F1A100453 (13): 113-SED-020
F1A100453 (14): 005-SED-001

There were no other nonconformances or observations noted with any analysis on this lot.

METHODS SUMMARY

F1A100453

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Gamma Spectroscopy - Ra-226 & Hits	EPA 901.1 MOD	
Isotopic Plutonium by Alpha Spectroscopy	EML A-01-R MOD	
Isotopic Uranium by Alpha Spectroscopy	EML A-01-R MOD	
Strontium 90 by GFPC	EPA 905 MOD	

References:

EML	"ENVIRONMENTAL MEASUREMENTS LABORATORY PROCEDURES MANUAL" HASL-300 28TH EDITION, VOLUME I and II DEPARTMENT OF ENERGY
EPA	"EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY**F1A100453**

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
MC7FX	001	44-SED-009	12/13/10	14:00
MC7F3	002	44-SED-010	12/13/10	14:10
MC7F4	003	44-SED-011	12/13/10	14:20
MC7F5	004	44-SED-012	12/13/10	14:30
MC7F6	005	346-SED-001	12/16/10	10:10
MC7GE	006	114-SED-001	12/16/10	08:40
MC7GF	007	114-SOI-002	12/16/10	08:55
MC7GG	008	114-SED-003	12/16/10	09:10
MC7GH	009	113-SED-014	12/17/10	10:30
MC7GJ	010	113-SED-015	12/17/10	10:35
MC7GK	011	113-SED-015A	12/17/10	10:35
MC7GL	012	113-SED-016	12/17/10	10:45
MC7GM	013	113-SED-020	12/17/10	11:15
MC7GN	014	005-SED-001	12/21/10	14:15

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Tetra Tech NUS, Inc

Client Sample ID: 005-SED-001

Radiochemistry

Lab Sample ID: F1A100453-014
 Work Order: MC7GN
 Matrix: SOLID

Date Collected: 12/21/10 1415
 Date Received: 01/10/11 0930

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Analysis Date
Gamma Ra-226 & hits by EPA 901.1 MOD				pCi/g		Batch # 1010229	Yld %	
Actinium 227	-0.11	U	0.30		0.24	30	01/12/11	02/03/11
Actinium 228	0.22		0.22		0.14	30	01/12/11	02/03/11
Bismuth 212	0.12	U	0.39		0.31	30	01/12/11	02/03/11
Bismuth 214	0.52		0.16		0.06	30	01/12/11	02/03/11
Cesium 137	-0.02	U	0.30	0.10	0.05	30	01/12/11	02/03/11
Cobalt 60	0.0	U	0.015	0.360	0.017	30	01/12/11	02/03/11
Lead 210	0.84		0.94		0.69	30	01/12/11	02/03/11
Lead 212	0.29		0.11		0.06	30	01/12/11	02/03/11
Lead 214	0.48		0.14		0.06	30	01/12/11	02/03/11
Potassium 40	8.1		1.6		0.2	30	01/12/11	02/03/11
Protactinium 231	0.2	U	1.0		0.8	30	01/12/11	02/03/11
Radium (226)	0.52	J	0.16	1.00	0.06	30	01/12/11	02/03/11
Radium 228	0.22		0.22		0.14	30	01/12/11	02/03/11
Thallium 208	0.057		0.057		0.040	30	01/12/11	02/03/11
Thorium 234	0.38	U	0.73		0.61	30	01/12/11	02/03/11
Uranium 235	0.05	U	0.18		0.15	30	01/12/11	02/03/11
Uranium 238	0.38	U	0.73		0.61	30	01/12/11	02/03/11
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/g		Batch # 1014104	Yld % 86	
Plutonium 239/40	0.009	U	0.017	0.100	0.013	240	01/14/11	01/19/11
SR-90 BY GFPC EPA-905 MOD				pCi/g		Batch # 1025271	Yld % 78	
Strontium 90	0.20	U	0.27	0.32	0.25	400	01/25/11	02/11/11
Iso URANIUM (LONG CT) DOE A-01-R MOD				pCi/g		Batch # 1021221	Yld % 81	
Uranium 235/236	0.006	U	0.011	0.098	0.006	240	01/21/11	01/26/11
Uranium 238	0.295		0.077	0.098	0.009	240	01/21/11	01/26/11

NOTE(S)

Data are incomplete without the case narrative.
 Bold results are greater than the MDL.

J Result is greater than sample detection limit but less than stated reporting limit.
 U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-226.32

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F1A100453
 Matrix: SOLID

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDL	Count Time	Prep Date	Lab Sample ID Analysis Date
Gamma Ra-226 & hits by EPA 901.1 MOD			pCi/g		Batch # 1010229	Yld %		F1A100000-229B
Actinium 227	-0.003	U	0.14		0.11	30	01/12/11	02/04/11
Actinium 228	0.06	U	0.15		0.11	30	01/12/11	02/04/11
Bismuth 212	0.0	U	0.31		0.26	30	01/12/11	02/04/11
Bismuth 214	0.032	U	0.076		0.066	30	01/12/11	02/04/11
Cesium 137	-0.02	U	0.26	0.10	0.05	30	01/12/11	02/04/11
Cobalt 60	0.0	U	0.083	0.360	0.069	30	01/12/11	02/04/11
Lead 210	-0.2	U	1.1		0.7	30	01/12/11	02/04/11
Lead 212	0.028	U	0.047		0.038	30	01/12/11	02/04/11
Lead 214	0.101		0.078		0.053	30	01/12/11	02/04/11
Potassium 40	0.30	U	0.52		0.34	30	01/12/11	02/04/11
Protactinium 231	-0.15	U	0.88		0.70	30	01/12/11	02/04/11
Radium (226)	0.032	U	0.076	1.00	0.066	30	01/12/11	02/04/11
Radium 228	0.06	U	0.15		0.11	30	01/12/11	02/04/11
Thallium 208	0.014	U	0.040		0.032	30	01/12/11	02/04/11
Thorium 234	0.28	U	0.60		0.52	30	01/12/11	02/04/11
Uranium 235	0.04	U	0.13		0.10	30	01/12/11	02/04/11
Uranium 238	0.28	U	0.60		0.52	30	01/12/11	02/04/11
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD			pCi/g		Batch # 1014104	Yld % 100		F1A140000-104B
Plutonium 239/40	-0.0008	U	0.0017	0.100	0.0038	240	01/14/11	01/19/11
Iso URANIUM (LONG CT) DOE A-01-R MOD			pCi/g		Batch # 1021221	Yld % 90		F1A210000-221B
Uranium 235/236	0.002	U	0.011	0.098	0.008	240	01/21/11	01/26/11
Uranium 238	0.001	U	0.012	0.098	0.012	240	01/21/11	01/26/11
SR-90 BY GFPC EPA-905 MOD			pCi/g		Batch # 1025271	Yld % 77		F1A250000-271B
Strontium 90	0.09	U	0.14	0.32	0.13	400	01/25/11	02/11/11

NOTE(S)

Data are incomplete without the case narrative.

Bold results are greater than the MDL

U Result is less than the sample detection limit.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection". Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F1A100453
 Matrix: SOLID

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	MDL	% Yld	% Rec	Lab Sample ID QC Control Limits
Gamma Ra-226 & hits by EPA 901.1 MOD							
			pCi/g	901.1 MOD			F1A100000-229C
Radium (226)	12.2	11.7	0.96	0.17		96	(81 - 103)
Thorium 232	9.50	9.69	0.90	0.20		102	(90 - 123)
	Batch #: 1010229			Analysis Date: 02/03/11			
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD							
			pCi/g	A-01-R MOD			F1A140000-104C
Plutonium 238	1.54	1.59	0.21	0.01	85	104	(74 - 112)
Plutonium 239/40	3.30	3.73	0.40	0.007	85	113	(84 - 115)
	Batch #: 1014104			Analysis Date: 01/19/11			
Iso URANIUM (LONG CT) DOE A-01-R MOD							
			pCi/g	A-01-R MOD			F1A210000-221C
Uranium 234	1.64	1.91	0.24	0.005	85	116	(86 - 125)
Uranium 238	1.70	1.98	0.24	0.005	85	116	(85 - 125)
	Batch #: 1021221			Analysis Date: 01/26/11			
SR-90 BY GFPC EPA-905 MOD							
			pCi/g	905 MOD			F1A250000-271C
Strontium 90	6.64	6.96	0.69	0.13	76	105	(79 - 123)
	Batch #: 1025271			Analysis Date: 02/11/11			

NOTE (S)

Calculations are performed before rounding to avoid round-off error in calculated results

a Spiked analyte outside of stated QC limits.

The MDL is an estimate of the measured concentration at which there is a 99% confidence that a given analyte is given sample matrix. This is functionally analogous to the "critical value" or the "limit of detection".

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F1A100453

Date Sampled: 12/13/10

Matrix: SOLID

Date Received: 01/10/11

Parameter	SAMPLE Result		Total Uncert. (2σ +/-)	% Yld	DUPLICATE Result	Total Uncert. (2σ +/-)	% Yld	QC Sample ID Precision
Gamma Ra-226 & hits by EPA 901.1 MOD				pCi/g	901.1 MOD		F1A100453-001	
Actinium 227	-0.02	U	0.23		-0.003	U	0.28	142 %RPD
Actinium 228	0.17		0.21		0.07	U	0.16	80 %RPD
Bismuth 212	0.16	U	0.36		0.0	U	0.23	200 %RPD
Bismuth 214	0.15		0.11		0.28		0.14	62 %RPD
Cesium 137	0.231		0.097		0.253		0.070	9 %RPD
Cobalt 60	0.0	U	0.016		-0.013	U	0.049	200 %RPD
Lead 210	1.1	U	1.5		-0.05	U	1.1	221 %RPD
Lead 212	0.144		0.077		0.220		0.077	42 %RPD
Lead 214	0.31		0.11		0.338		0.098	10 %RPD
Potassium 40	3.2		1.1		3.3		1.0	4 %RPD
Protactinium 231	0.07	U	0.87		0.03	U	0.97	70 %RPD
Radium (226)	0.15	J	0.11		0.28	J	0.14	62 %RPD
Radium 228	0.17		0.21		0.07	U	0.16	80 %RPD
Thallium 208	0.009	U	0.054		0.063		0.036	148 %RPD
Thorium 234	0.66		0.79		0.68		0.75	4 %RPD
Uranium 235	-0.03	U	11		-0.15	U	0.50	137 %RPD
Uranium 238	0.66		0.79		0.68		0.75	4 %RPD
Batch #:			1010229 (Sample)		1010229 (Duplicate)			
Iso URANIUM (LONG CT) DOE A-01-R MOD				pCi/g	A-01-R MOD		F1A100453-001	
Uranium 235/236	0.01		0.014	83	0.006	U	0.015	87 47 %RPD
Uranium 238	0.233		0.064	83	0.245		0.066	87 5 %RPD
Batch #:			1021221 (Sample)		1021221 (Duplicate)			
Iso PLUTONIUM (LONG CT) DOE A-01-R MOD				pCi/g	A-01-R MOD		F1A100453-009	
Plutonium 239/40	-0.011	U	0.011	85	0.009	U	0.023	82 1570 %RPD
Batch #:			1014104 (Sample)		1014104 (Duplicate)			
SR-90 BY GFPC EPA-905 MOD				pCi/g	905 MOD		F1A100453-010	
Strontium 90	0.12	U	0.26	74	-0.16	U	0.27	69 1340 %RPD
Batch #:			1025271 (Sample)		1025271 (Duplicate)			

NOTE(S)

Data are incomplete without the case narrative.

Calculations are performed before rounding to avoid round-off error in calculated results

J Result is greater than sample detection limit but less than stated reporting limit.

U Result is less than the sample detection limit.

J-9

F1A100453

Ra-226 results analyzed by EPA 901.1 MOD were calculated and reported from the 46.09 percent abundant 609.31 KeV line of Bi-214.

F1A100453

CLIENT ANALYSIS SUMMARY

Storage Loc:

RAD

Project Manager: EKS
 Project: 1068373
 PO#: 1068373
 Client: 375241 Tetra Tech NUS, Inc

Quote #: 87968
 Alameda
 Report to: Lawson Bailey

SDG:
 #SMPS in LOT: 14

Date Received: 2011-01-10
 Analytical Due Date: 2011-02-07
 Report Due Date: 2011-02-10
 Report Type: X
 EDD Code: 00

Follow DOD QSM 4.1

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
1	44-SED-009			2010-12-13/ 1400	MC7FX	SOLID
SAMPLE COMMENTS:						
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA IN-HOUSE RAD SCREEN	01 STANDARD TEST SET	PROT: A	WRK LOC 06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9 Dry, Grind, and Fill Geometry -> 21 day In-growth	2X SPECIAL PROJECTS	PROT: A	WRK LOC 06
XX 2M	EML A-01-R MOD	SOLID, A-01-R MOD, Iso URANIUM (LONG CT)	J2 Extraction Chromatography - Sequential Actinides	01 STANDARD TEST SET	PROT: A	WRK LOC 06
X XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9 Dry, Grind, and Fill Geometry -> 21 day In-growth	2X SPECIAL PROJECTS	PROT: A	WRK LOC 06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
2	44-SED-010			2010-12-13/ 1410	MC7F3	SOLID
SAMPLE COMMENTS:						
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA IN-HOUSE RAD SCREEN	01 STANDARD TEST SET	PROT: A	WRK LOC 06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9 Dry, Grind, and Fill Geometry -> 21 day In-growth	2X SPECIAL PROJECTS	PROT: A	WRK LOC 06
XX 2M	EML A-01-R MOD	SOLID, A-01-R MOD, Iso URANIUM (LONG CT)	J2 Extraction Chromatography - Sequential Actinides	01 STANDARD TEST SET	PROT: A	WRK LOC 06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
3	44-SED-011			2010-12-13/ 1420	MC7F4	SOLID
SAMPLE COMMENTS:						
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA IN-HOUSE RAD SCREEN	01 STANDARD TEST SET	PROT: A	WRK LOC 06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9 Dry, Grind, and Fill Geometry -> 21 day In-growth	2X SPECIAL PROJECTS	PROT: A	WRK LOC 06
XX 2M	EML A-01-R MOD	SOLID, A-01-R MOD, Iso URANIUM (LONG CT)	J2 Extraction Chromatography - Sequential Actinides	01 STANDARD TEST SET	PROT: A	WRK LOC 06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
4	44-SED-012			2010-12-13/ 1430	MC7F5	SOLID
SAMPLE COMMENTS:						
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA IN-HOUSE RAD SCREEN	01 STANDARD TEST SET	PROT: A	WRK LOC 06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9 Dry, Grind, and Fill Geometry -> 21 day In-growth	2X SPECIAL PROJECTS	PROT: A	WRK LOC 06
XX 2M	EML A-01-R MOD	SOLID, A-01-R MOD, Iso URANIUM (LONG CT)	J2 Extraction Chromatography - Sequential Actinides	01 STANDARD TEST SET	PROT: A	WRK LOC 06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
5	346-SED-001			2010-12-16/ 1010	MC7F6	SOLID
SAMPLE COMMENTS:						
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA IN-HOUSE RAD SCREEN	01 STANDARD TEST SET	PROT: A	WRK LOC 06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9 Dry, Grind, and Fill Geometry -> 21 day In-growth	2X SPECIAL PROJECTS	PROT: A	WRK LOC 06
XX 2M	EML A-01-R MOD	SOLID, A-01-R MOD, Iso URANIUM (LONG CT)	J2 Extraction Chromatography - Sequential Actinides	01 STANDARD TEST SET	PROT: A	WRK LOC 06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
6	114-SED-001			2010-12-16/ 840	MC7GE	SOLID
SAMPLE COMMENTS:						
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA IN-HOUSE RAD SCREEN	01 STANDARD TEST SET	PROT: A	WRK LOC 06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9 Dry, Grind, and Fill Geometry -> 21 day In-growth	2X SPECIAL PROJECTS	PROT: A	WRK LOC 06

F1A100453

CLIENT ANALYSIS SUMMARY

Storage Loc:

RAD

Project Manager: EKS Quote #: 87968 SDG:
 Project: 1068373 Alameda
 PO#: 1068373 Report to: Lawson Bailey
 Client: 375241 Tetra Tech NUS, Inc

Date Received: 2011-01-10
 Analytical Due Date: 2011-02-07
 Report Due Date: 2011-02-10
 Report Type: X
 EDD Code: 00

#SMPS in LOT: 14

Follow DOD QSM 4.1

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A			
7	114-SOI-002			2010-12-16/ 855	MC7GF	SOLID			
SAMPLE COMMENTS:									
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A			
8	114-SED-003			2010-12-16/ 910	MC7GG	SOLID			
SAMPLE COMMENTS:									
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A			
9	113-SED-014			2010-12-17/ 1030	MC7GH	SOLID			
SAMPLE COMMENTS:									
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06
XX 2L	EML A-01-R MOD	SOLID, A-01-R MOD, Iso PLUTONIUM (LONG C	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX ZO	EPA 905 MOD	SOLID, 905 MOD, SR-90 BY GFPC EPA-905 M	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: A	WRK LOC	06
X XX ZO	EPA 905 MOD	SOLID, 905 MOD, SR-90 BY GFPC EPA-905 M	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A			
10	113-SED-015			2010-12-17/ 1035	MC7GJ	SOLID			
SAMPLE COMMENTS:									
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06
XX 2L	EML A-01-R MOD	SOLID, A-01-R MOD, Iso PLUTONIUM (LONG C	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX ZO	EPA 905 MOD	SOLID, 905 MOD, SR-90 BY GFPC EPA-905 M	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A			
11	113-SED-015A			2010-12-17/ 1035	MC7GK	SOLID			
SAMPLE COMMENTS:									
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hits by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06
XX 2L	EML A-01-R MOD	SOLID, A-01-R MOD, Iso PLUTONIUM (LONG C	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX ZO	EPA 905 MOD	SOLID, 905 MOD, SR-90 BY GFPC EPA-905 M	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A			
12	113-SED-016			2010-12-17/ 1045	MC7GL	SOLID			
SAMPLE COMMENTS:									
XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06

F1A100453

CLIENT ANALYSIS SUMMARY

Storage Loc: **RAD**
 Date Received: 2011-01-10
 Analytical Due Date: 2011-02-07
 Report Due Date: 2011-02-10
 Report Type: X
 EDD Code: 00

Project Manager: EKS Quote #: 87968 SDG:
 Project: 1068373 Alameda
 PO#: 1068373 Report to: Lawson Bailey
 Client: 375241 Tetra Tech NUS, Inc

#SMPS in LOT: 14

Follow DOD QSM 4.1

Follow DOD QSM 4.1									
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XX 11	EPA	801.1 MOD	SOLID, 801.1 MOD, Gamma Ra-226 & hls by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06
XX 2L	EML	A-01-R MOD	SOLID, A-01-R MOD, Iso PLUTONIUM (LONG C	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX ZO	EPA	905 MOD	SOLID, 905 MOD, SR-90 BY GFPC EPA-905 M	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
13	113-SED-020			2010-12-17/ 1115	MC7GM	SOLID

SAMPLE COMMENTS:

XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hls by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06
XX 2L	EML A-01-R MOD	SOLID, A-01-R MOD, Iso PLUTONIUM (LONG C	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX ZO	EPA 905 MOD	SOLID, 905 MOD, SR-90 BY GFPC EPA-905 M	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: A	WRK LOC	06

SAMPLE #	CLIENT SAMPLE ID	Site ID	Client Matrix	DATE/TIME SAMPLED	WORKORDER	A
14	005-SED-001			2010-12-21/ 1415	MC7GN	SOLID

SAMPLE COMMENTS:

XX ZV	RAD SCREEN	SOLID, RAD SCREEN	RA	IN-HOUSE RAD SCREEN	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 11	EPA 901.1 MOD	SOLID, 901.1 MOD, Gamma Ra-226 & hls by	J9	Dry, Grind, and Fill Geometry -> 21 day in-growth	2X	SPECIAL PROJECTS	PROT: A	WRK LOC	06
XX 2L	EML A-01-R MOD	SOLID, A-01-R MOD, Iso PLUTONIUM (LONG C	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX 2M	EML A-01-R MOD	SOLID, A-01-R MOD, Iso URANIUM (LONG CT)	J2	Extraction Chromatography - Sequential Actinides	01	STANDARD TEST SET	PROT: A	WRK LOC	06
XX ZO	EPA 905 MOD	SOLID, 905 MOD, SR-90 BY GFPC EPA-905 M	FW	Dry, Grind, Digest, Precipitate, Separation	01	STANDARD TEST SET	PROT: A	WRK LOC	06

Starman, Erika

From: Bailey, Lawson [Lawson.Bailey@tetrattech.com]
Sent: Tuesday, January 11, 2011 9:41 AM
To: rick_gault@charter.net; Starman, Erika
Subject: RE: Alameda samples rec'd 1/10

Gamma spec (Ra-226 and Cs-137) and isotopic uranium (DU).

Lawson Bailey | Senior Health Physicist

Direct: 803.641.6326 | Main: 803.649.7963 | Cell: 706.830.7530 | Fax: 803.642.8454

Lawson.Bailey@tetrattech.com

Tetra Tech | Complex World, Clear Solutions

900 Trail Ridge Road | Aiken, South Carolina 29803 | www.tetrattech.com

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From: rick_gault@charter.net [mailto:rick_gault@charter.net]
Sent: Monday, January 10, 2011 5:40 PM
To: Starman, Erika
Cc: Bailey, Lawson
Subject: RE: Alameda samples rec'd 1/10

Sorry I should have found out prior to shipping. Lawson this area was not listed on the sheet you gave me and I meant to ask you earlier. This sample is from the 346 pad buffer area.

Rick

On Mon, Jan 10, 2011 at 2:24 PM, Starman, Erika wrote:

Good Afternoon,
We received a shipment today of samples for RAD analyses. One sample, 346-SED-001, had no analysis indicated. Can you please advise on which analysis you would like for this sample?
Thank you,

Erika K. Starman
Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
13715 Rider Trail North
Earth City, MO 63045
314.298.8566 | Fax 314.298.8757
www.testamericainc.com

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Please consider the environment before printing this e-mail. ­­

F1A100453

Lot #(s): F1A100453

TestAmerica St. Louis

CONDITION UPON RECEIPT FORM

Client: Lawson

Quote No: 87968

COC/RFA No: 171935 / 171936

Initiated By: AB Date: 1-10-11 Time: 0930

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages: Y N

Shipping # (s):* _____ Sample Temperature (s):** _____

1. _____	6. _____	1. <u>ambient</u>	6. _____
2. _____	7. _____	2. _____	7. _____
3. _____	8. _____	3. _____	8. _____
4. _____	9. _____	4. _____	9. _____
5. _____	10. _____	5. _____	10. _____

**** 2DA**
 Equip# 1780330 13:12 07JAN11
 TRK# **8741 5839 8065**

*Numbered shipping lines correspond to Numbered Sample Temp lines
 **Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Are there custody seals present on the cooler?	8. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Are there custody seals present on bottles?
2. <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample received with Chain of Custody?	11. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample received in proper containers?
5. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Was sample received broken?	13. <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Is sample volume sufficient for analysis?	14. <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Was pH taken by original TestAmerica lab?

¹ For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: _____

Corrective Action:
 Client Contact Name: _____ Informed by: _____
 Sample(s) processed "as is"
 Sample(s) on hold until: _____ If released, notify: _____
 Project Management Review: AMS Date: 1/12/11

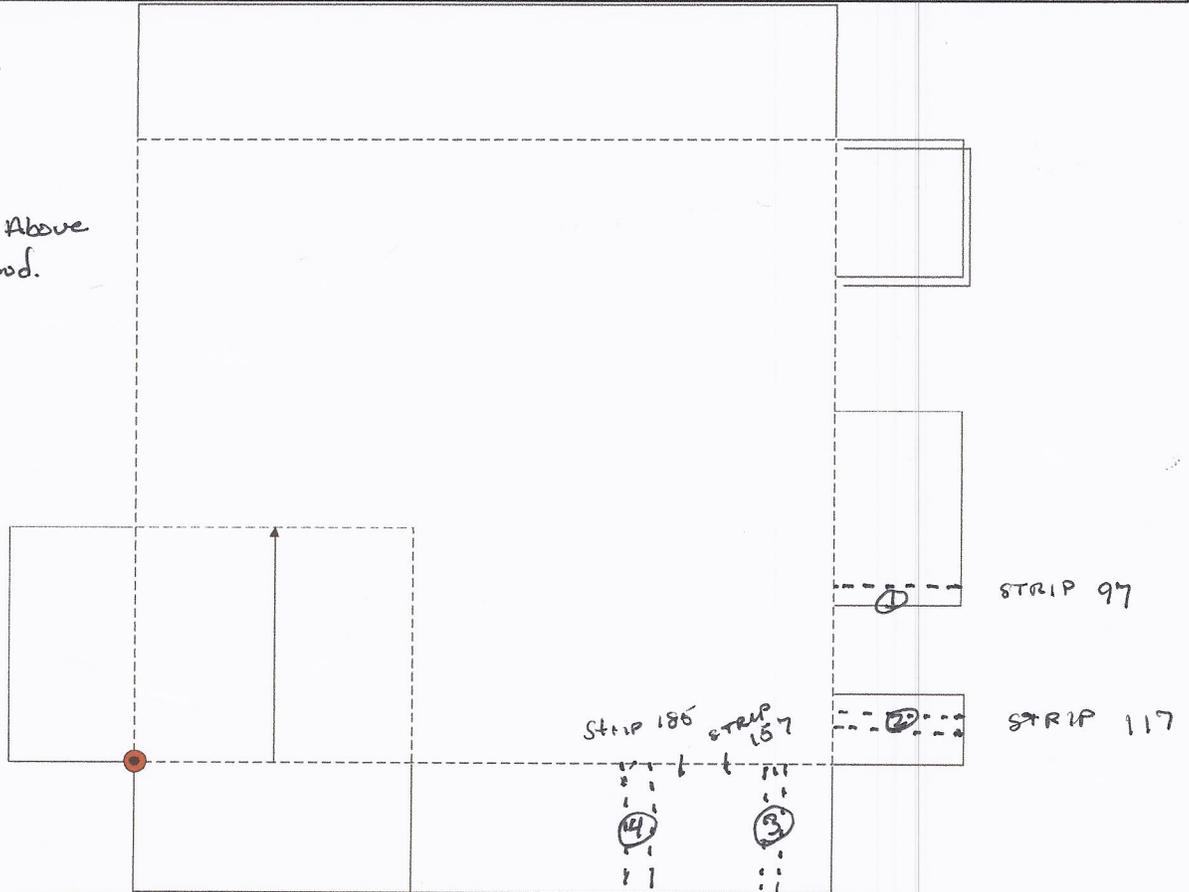
APPENDIX K
SURFACE CONTAMINATION MONITOR INVESTIGATION SURVEYS (ON CD)

Alameda Hand Held Scan Survey Form

Building:	5	Survey Unit:	4 Walls < 6'
Instrument Model Number:	2221	Serial Number:	148451
Probe Model Number:	43-68	Serial Number:	177646
Survey Type (Circle One):	<input checked="" type="radio"/> Alpha <input type="radio"/> Beta		

Investigation

NCAB = NO Counts Above Background.



	Material Type	Notes	Counts (cpm)		Material Type	Notes	Counts (cpm)
1	4	Strip 97	NCAB	10	/		
2	↓	strip 117	↓	11			
3		Strip 157		12			
4	↓	Strip 185	↓	13			
5				14			
6				15		N	
7		A		16		A	
8		N		17			
9				18			

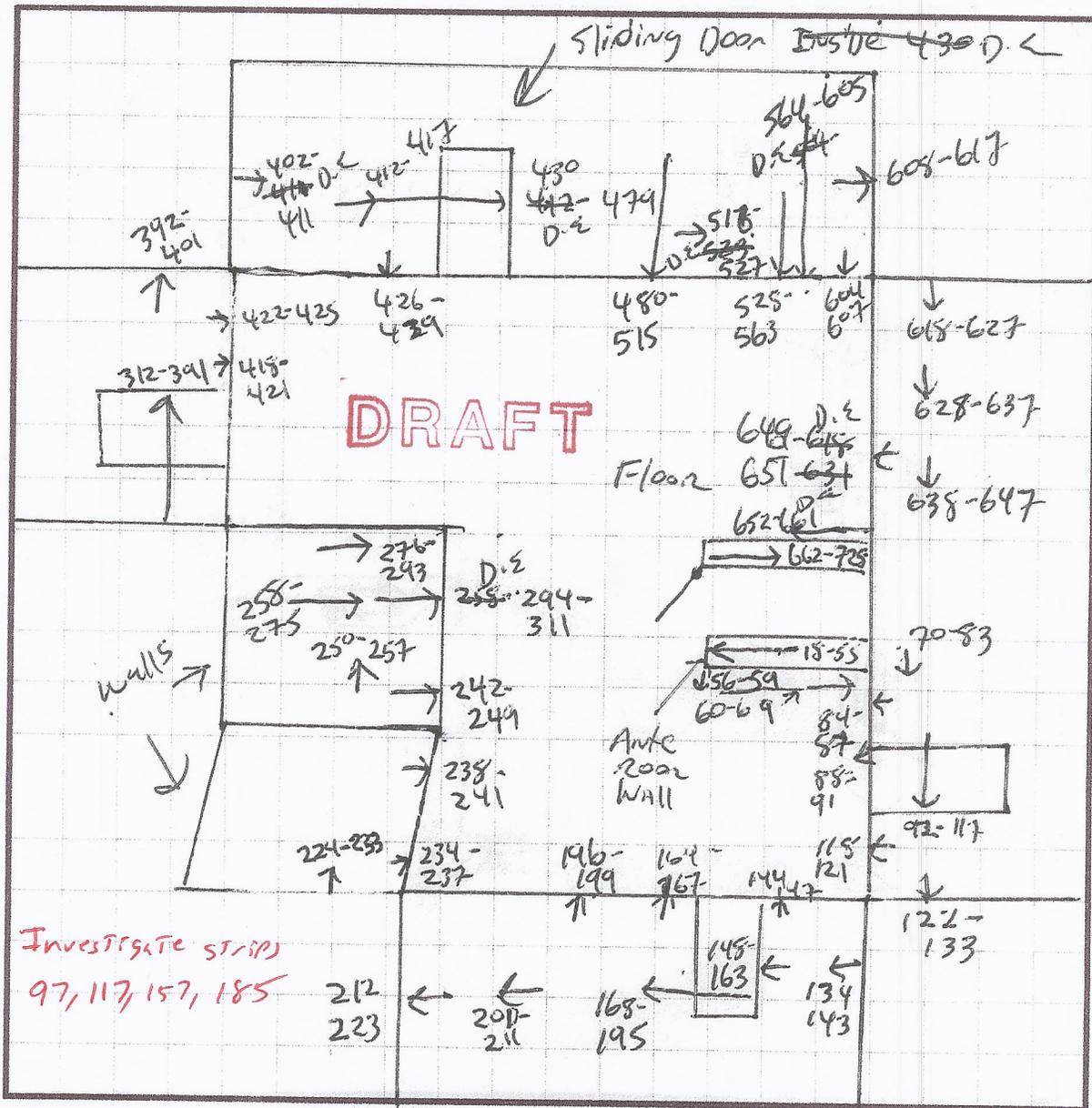
Type	Material	Type	Material	Type	Material	Type	Material
1	Asphalt	2	Cinder Block	3	Concrete	4	Drywall
5	Steel	6	Wood	7	Glass		

Data Review	Name	Date	Signature
Operator	Ken Cordeiro	3/1/11	Ken Cordeiro
Operator	N/A	N/A	N/A
Data Processor	J.I. Cohn	3-3-11	J.I. Cohn
Project Mgr.	R.W. Dubiel	3-3-11	R.W. Dubiel

Alameda SCM Survey Form

D.E

Survey File Name:	KA040 KA041A		
Building:	5	Survey Unit:	504 Class 1
SCM Number:	4	Detector Type (Circle One):	C90 <u>C180</u> T90 T120 T180
Surface (Circle One):	Floors	<u>Walls < 6'</u>	Walls > 6'
Material Type (Circle One):	Asphalt	Cinder Block	Concrete
	<u>Drywall</u>	Steel	Wood
Survey Type (Circle One):	<u>Alpha</u> Beta		



Data Review	Name	Date	Signature
Operator	DAVID SUTTON	11-20-10	<i>David Sutton</i>
Operator	Brannon Thomas	11-20-10	<i>Brannon Thomas</i>
Data Processor	JEFF VASSETTI	2.14.2011	<i>Jeff Vassetti</i>
Project Mgr.			

Survey Report

Survey File Name:	FA0411A
Survey Date:	November 17, 2010
Survey Equipment:	SCM4
Detector(s):	R180 C180
Surveyor(s):	EATON/THROWER
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	R180: 50.0% C180: 50.0%
SIMS Version:	V5.31
SCM Version:	V3.4d
Survey Results	
Maximum 100 cm²:	507 dpm/100 cm ²
Area Exceeding 100 cm² Levels:	0.15 m ²

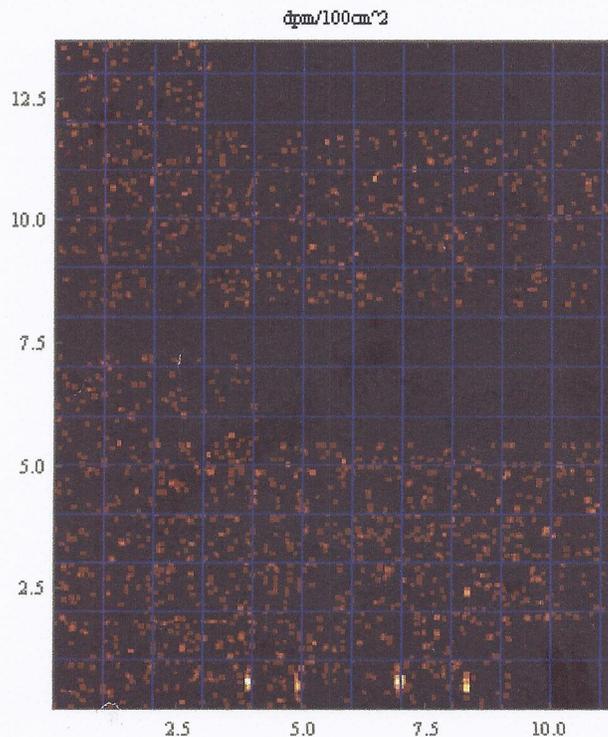


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

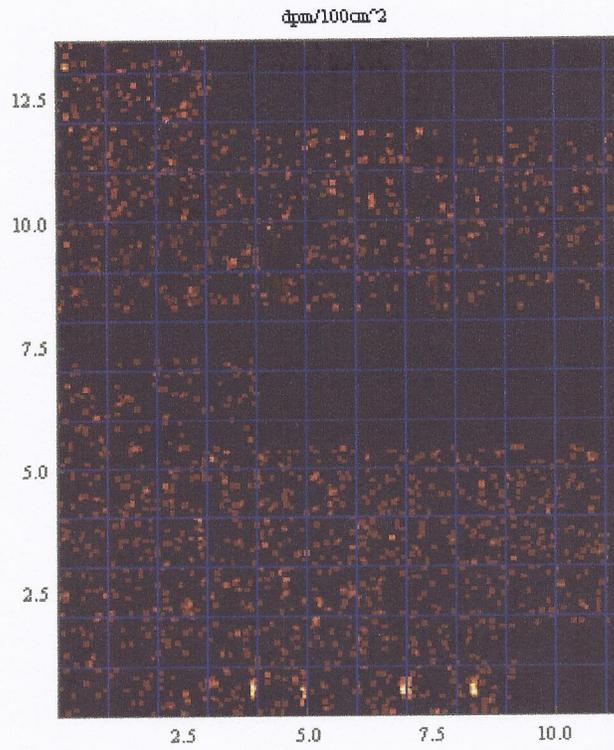


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

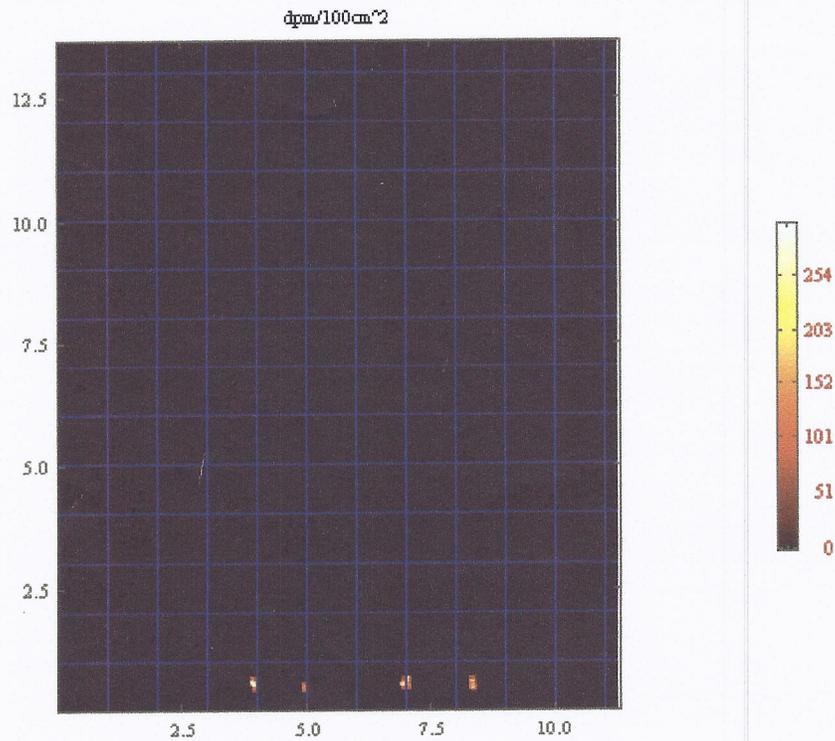


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

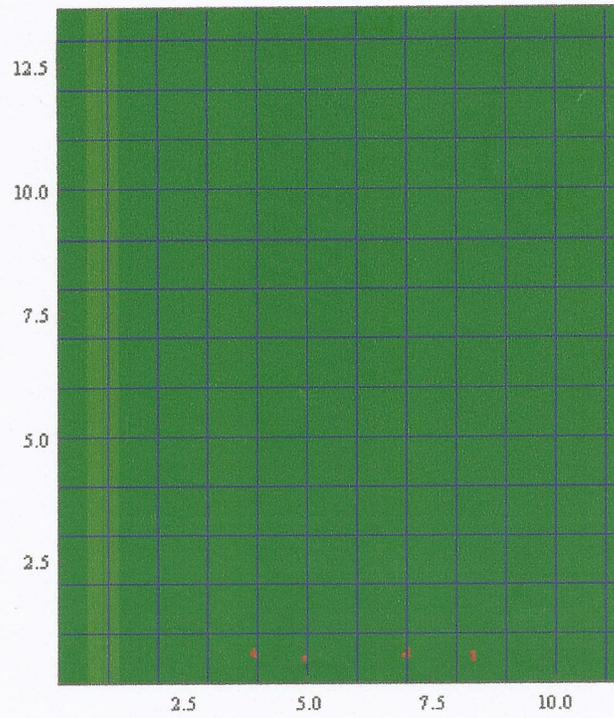


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

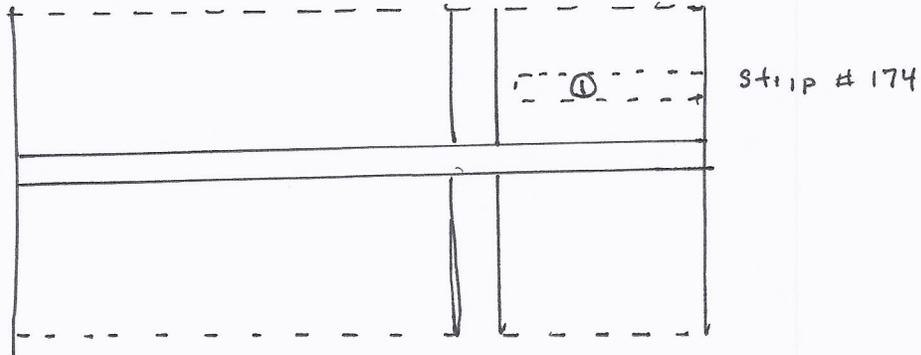
Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	507	97	(395,60)	(0,50)	N/A	N/CAB	1
Spot	234	157	(700,65)	(5,55)	N/A	N/CAB	
Spot	195	185	(835,65)	(0,55)	N/A	N/CAB	
Spot	176	185	(835,50)	(0,40)	N/A	N/CAB	
Spot	136	117	(500,50)	(5,40)	N/A	N/CAB	

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Alameda Hand Held Scan Survey Form

Building:	5	Survey Unit:	23 Ceiling
Instrument Model Number:	2221	Serial Number:	148426
Probe Model Number:	43-68	Serial Number:	149773
Survey Type (Circle One):	<input checked="" type="radio"/> Alpha <input type="radio"/> Beta		

Note: NCAB = No Counts Above background



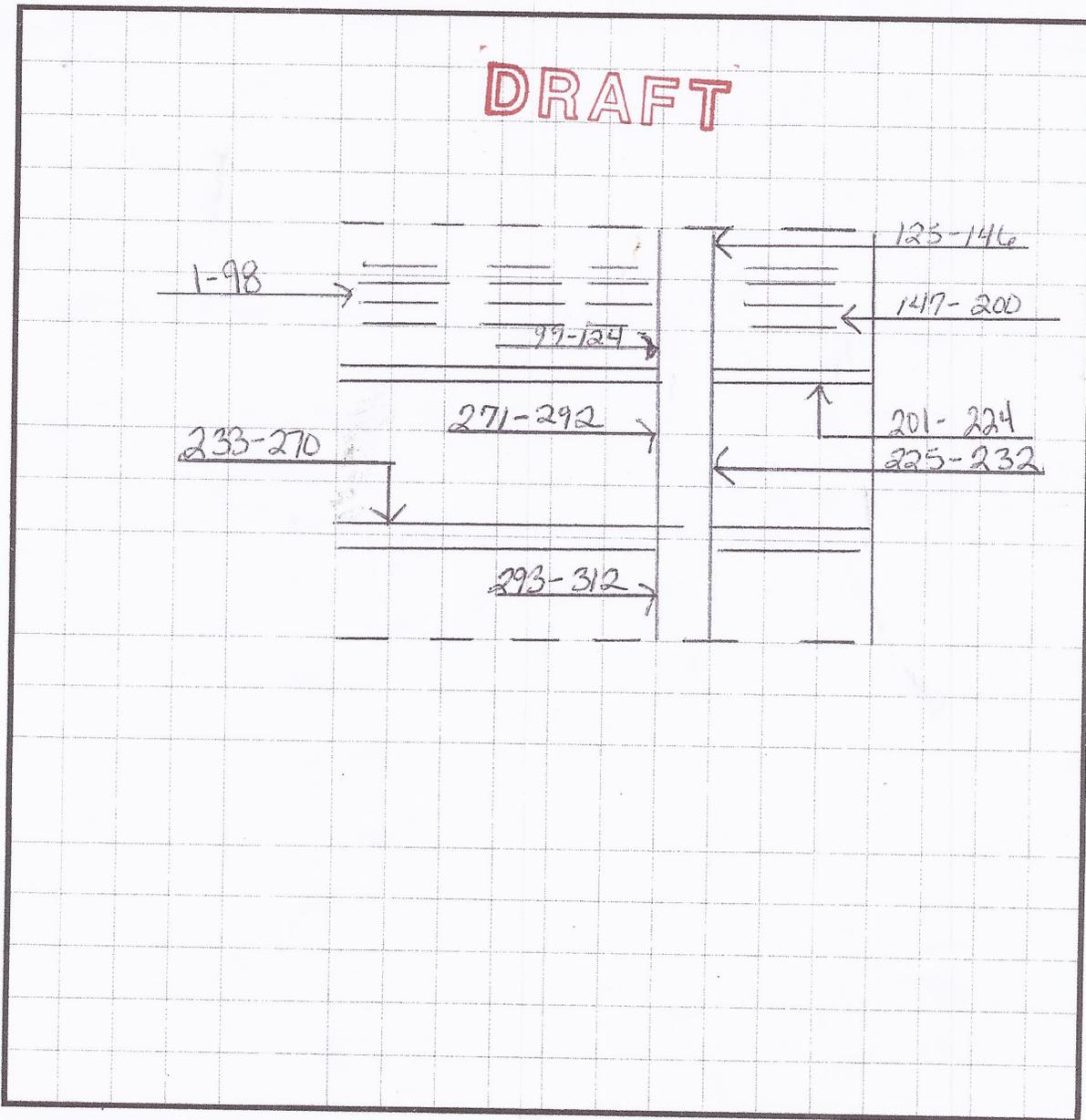
	Material Type	Notes	Counts (cpm)		Material Type	Notes	Counts (cpm)
1	6	Strip # 174	NCAB	10			
2				11			
3				12			
4				13			
5				14		A	
6				15			
7		N		16		N	
8				17			
9				18			

Type	Material	Type	Material	Type	Material	Type	Material
1	Asphalt	2	Cinder Block	3	Concrete	4	Drywall
5	Steel	6	Wood	7	Glass		

Data Review	Name	Date	Signature
Operator	Ken Cordova	3/9/11	<i>Ken Cordova</i>
Operator	N/A	N/A	N/A
Data Processor	J.I. Cohn	3-9-11	<i>J.I. Cohn</i>
Project Mgr.	R.W. Dubiel	3-9-11	<i>R.W. Dubiel</i>

Alameda SCM Survey Form

Survey File Name:	FA2331 A		
Building:	5	Survey Unit:	23
SCM Number:	4	Detector Type (Circle One):	C90 (C180) T90 T120 T180
Surface (Circle One):	Floors	Walls < 6'	Walls > 6' Ceiling
Material Type (Circle One):	Asphalt	Cinder Block	Concrete
	Drywall	Steel	Wood
Survey Type (Circle One):	Alpha Beta		



Data Review	Name	Date	Signature
Operator	Mike Patrick	3-7-11 3-7-11	Mike Patrick
Operator	EULON PATRICK	3-7-11	Eulon Patrick
Data Processor	JEFF VASSETI	3-8-11	
Project Mgr.			

Survey Report

Survey File Name:	FA2331A
Survey Date:	March 7, 2011
Survey Equipment:	SCM4
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	190 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.02 m ²

This survey is not position correlated.

Primary Detector:

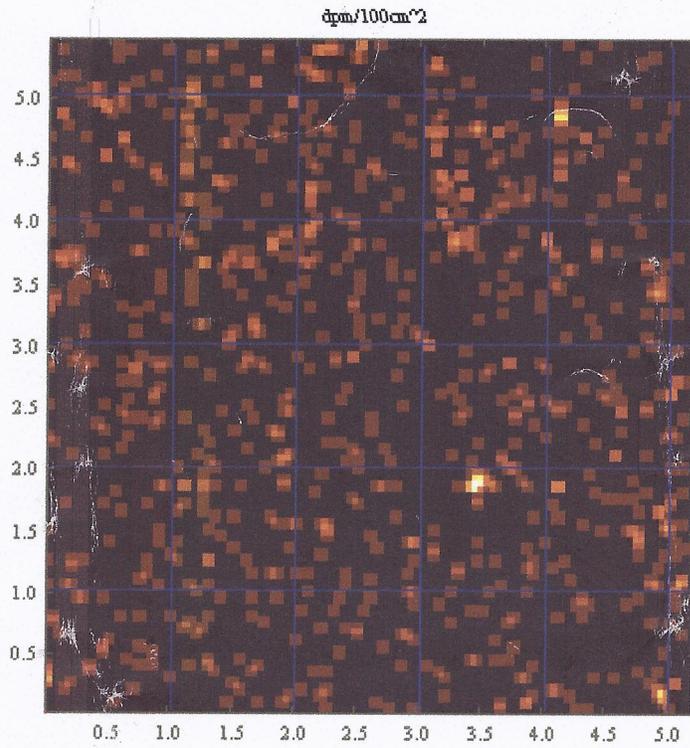


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

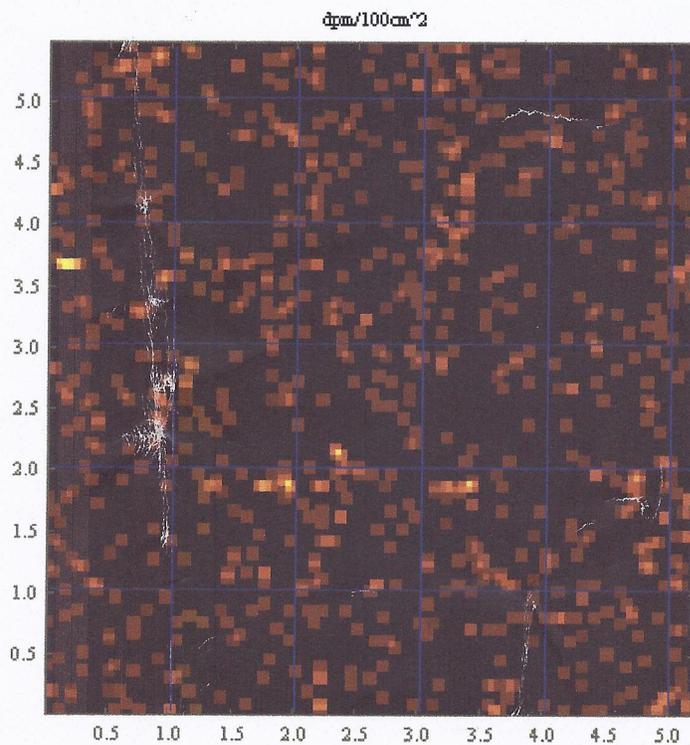


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

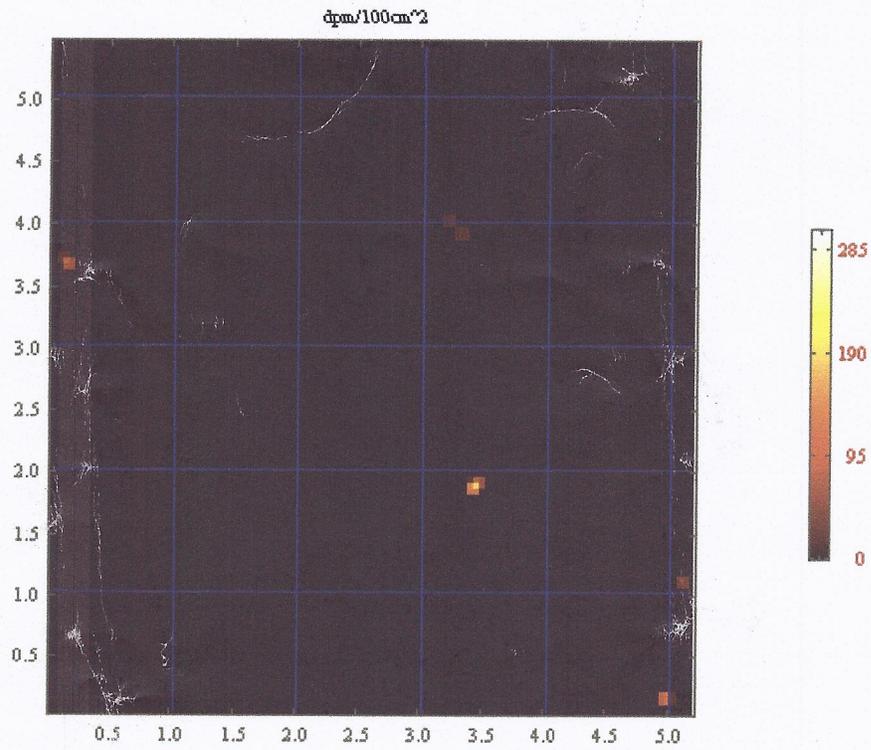


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

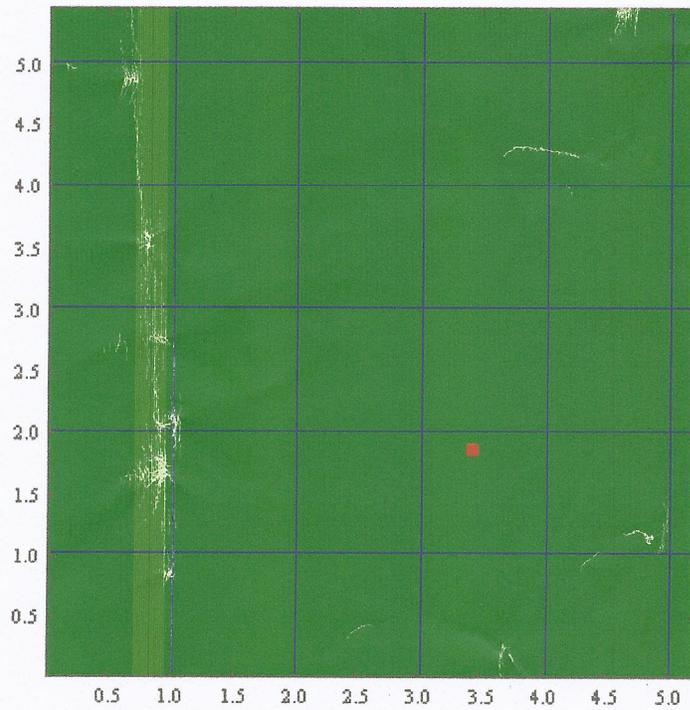


Figure 4: Yellow denotes meter grids that exceed criteria, while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	190	174	(345,190)	(0,0)	N/A	NcAB	1min

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Note: NcAB = No Counts Above background

Alameda SCM Survey Form

Survey File Name:	FA2621A		
Building:	5	Survey Unit:	26
SCM Number:	8	Detector Type (Circle One):	C90 <u>C180</u> T90 T120 T180
Surface (Circle One):	Floors	Walls < 6'	<u>Walls > 6'</u> Ceiling
Material Type (Circle One):	Asphalt	Cinder Block	<u>Concrete</u>
	Drywall	Steel	Wood
Survey Type (Circle One):	<u>Alpha</u> Beta		

DRAFT

1-190

NOTE: Stamps are on ledge below windows

↑ Survey results on last page - No results above release criteria

Data Review	Name	Date	Signature
Operator	WIKI Patrick	1-18-11	<i>WIKI Patrick</i>
Operator	James Kirby	1-18-11	<i>James Kirby</i>
Data Processor	JEFF VASSETI	1-28-11	<i>Jeff Vasseti</i>
Project Mgr.	R.W. Dabtel	1-28-11	<i>R.W. Dabtel</i>

Survey Report

Survey File Name:	FA2621A
Survey Date:	January 18, 2011
Survey Equipment:	SCM8
Detector(s):	C180
Surveyor(s):	PATRICKS
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C180: 50.0%
SIMS Version:	V5.31
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	385 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.15 m ²

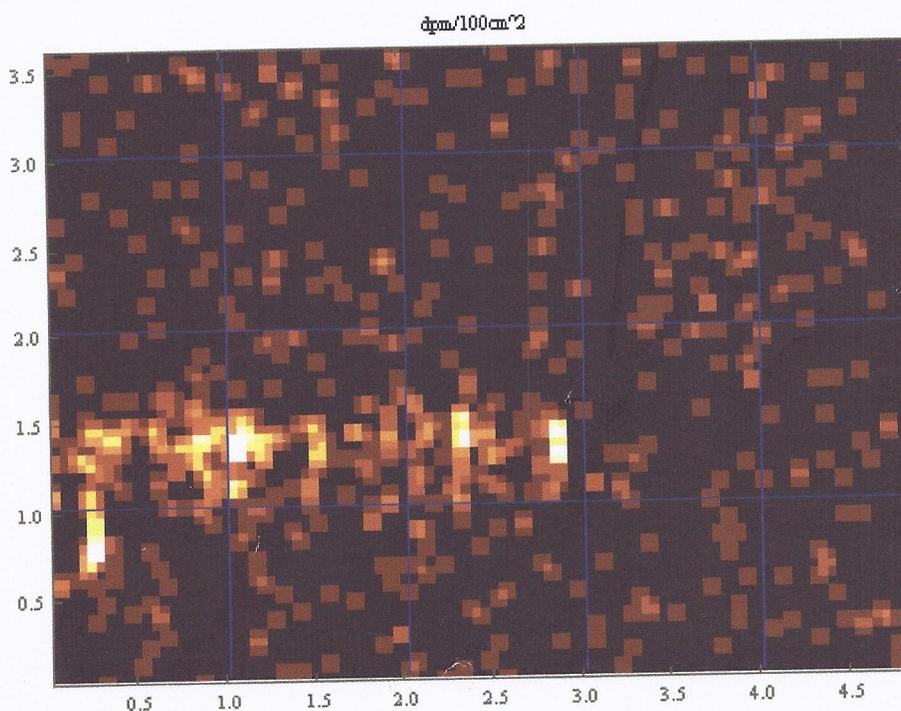


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

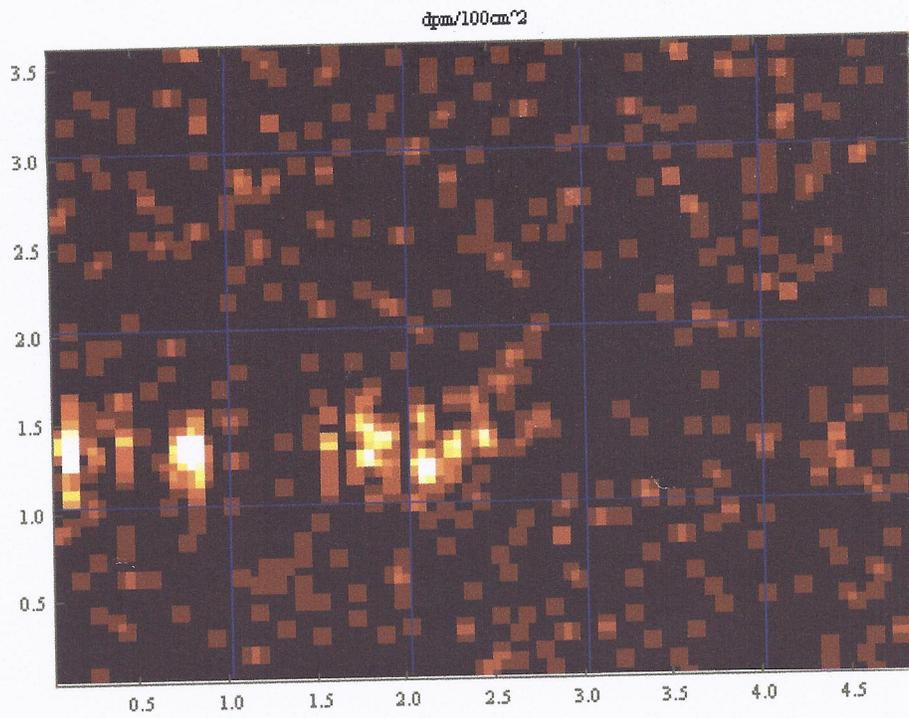


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

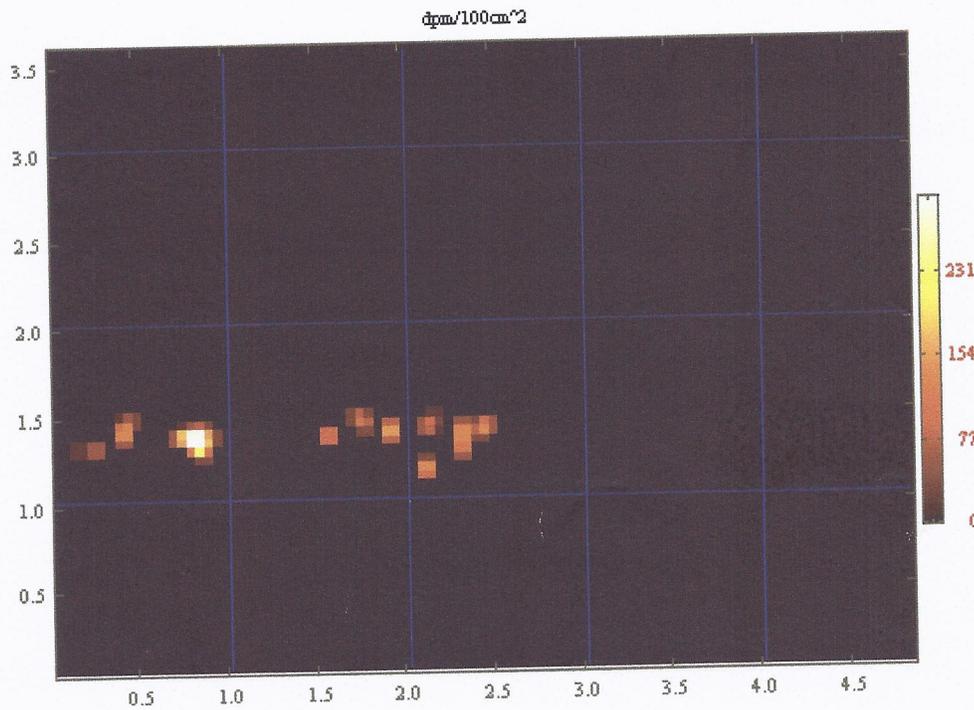


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

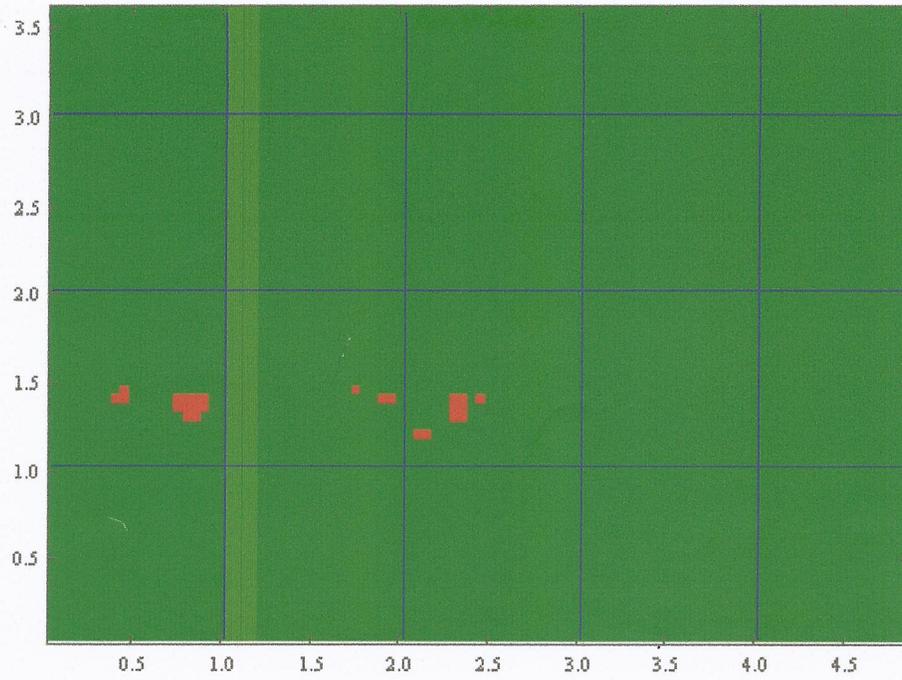


Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

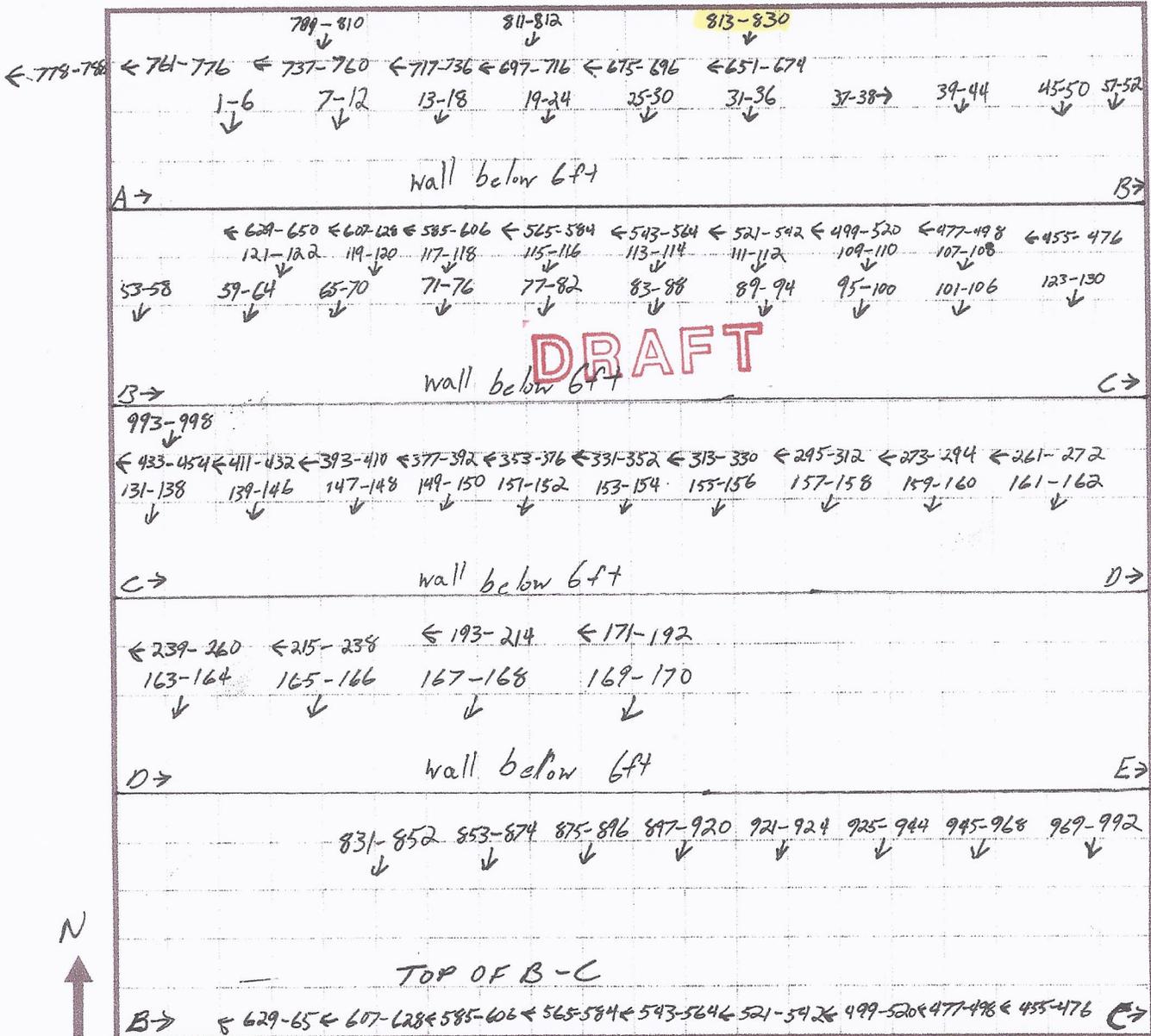
Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	385	18	(85,135)	(0,130)	N/A	4	1
Spot	154	38	(190,140)	(5,135)	N/A	NDAB	1
Spot	137	42	(210,120)	(5,115)	N/A	NDAB	1
Spot	137	50	(245,140)	(0,135)	N/A	NDAB	1
Spot	134	46	(230,135)	(5,130)	N/A	NDAB	1
Spot	133	10	(45,145)	(0,140)	N/A	NDAB	1
Spot	116	36	(175,145)	(0,140)	N/A	2	1

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

Alameda SCM Survey Form

Survey File Name:	FA2621B		
Building:	5	Survey Unit:	SU 26
SCM Number:	9	Detector Type (Circle One):	<u>C90</u> C180 T90 T120 T180
Surface (Circle One):	Floors	Walls < 6'	<u>Walls > 6'</u> Ceiling
Material Type (Circle One):	Asphalt	Cinder Block	Concrete
	Drywall	<u>Steel Glass</u>	Wood
Survey Type (Circle One):	<u>Alpha</u> Beta		



Investigation results on last page - No results above release criteria

Data Review	Name	Date	Signature
Operator	BRANDON THROWER	2-24-11	Brandon Thrower
Operator	KEN CORDOVA	2-24-11	Ken Cordova
Data Processor	JEFF VASSETTI	3-1-11	Jeff Vasseti
Project Mgr.	R.W. Dubiel	3-2-11	R.W. Dubiel

Survey Report

Survey File Name:	FA2621B
Survey Date:	February 28, 2011
Survey Equipment:	SCM9
Detector(s):	C90
Surveyor(s):	CORDOVA
Criteria	
Any 100 cm² Measurement:	100 net dpm/100 cm ²
Average Over Any 1 m²:	100 net dpm/100 cm ²
System Information	
Background:	Background not Subtracted
Efficiency (100 cm²):	C90: 50.0%
SIMS Version:	V5.3m
SCM Version:	V3.4a
Survey Results	
Maximum 100 cm²:	305 dpm/100 cm²
Area Exceeding 100 cm² Levels:	0.03 m ²

This survey is not position correlated.

Primary Detector:

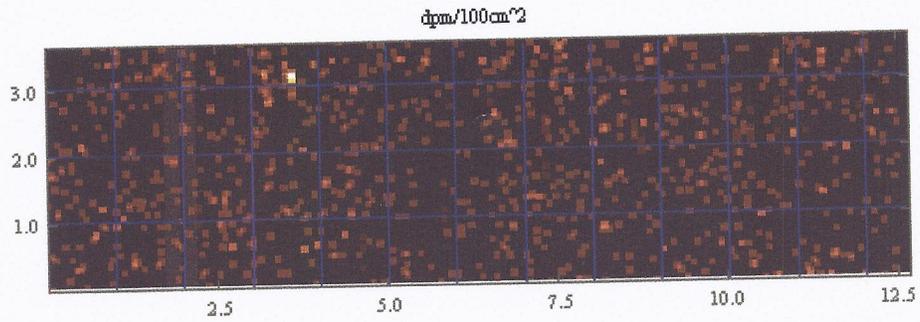


Figure 1: Meter Grid overlaid onto image plot of 100cm² areas..

Recount Detector:

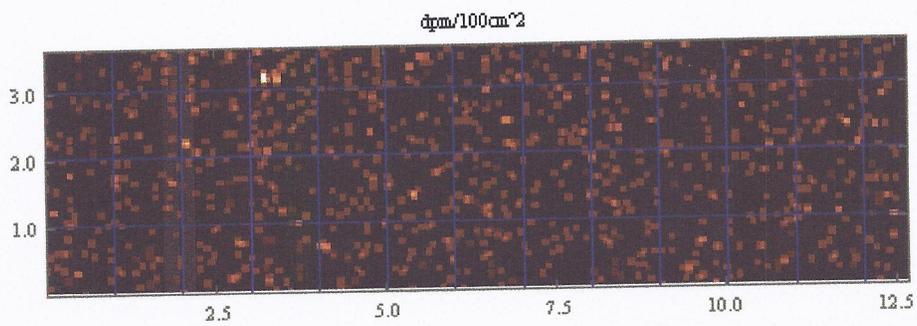


Figure 2: Meter Grid overlaid onto image plot of 100cm² areas..

Coincidence Logic:

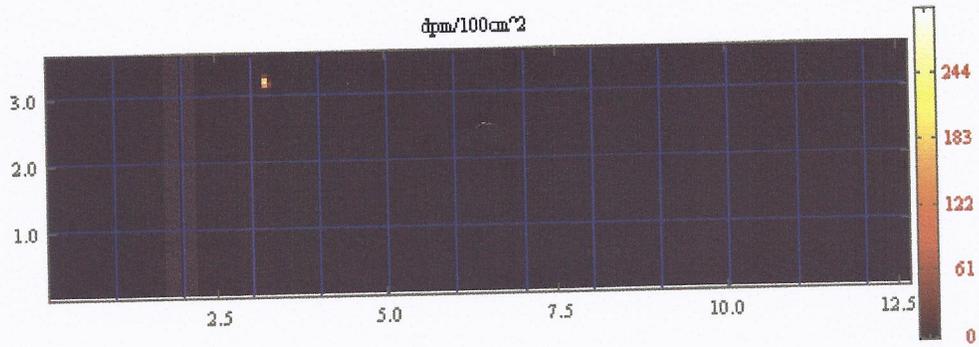


Figure 3: Meter Grid overlaid onto image plot of 100cm² areas. The color scale is in dpm per 100cm².

Figure 4: Yellow denotes meter grids that exceed criteria , while red corresponds to 100cm² areas exceeding criteria.

Investigation Table

Type	Value	Strip	Location From SW of Survey (X,Y)cm	Location From SW of Strip (X,Y)cm	Grid (X,Y)	Inv (Counts)	Count Time
Spot	305	816	(325,315)	(0,40)	N/A	2	2min

This table details the location of values that exceed criteria. In the case to 100 cm² (spot) alarms both the SCM strip number and the location relative to the south west corner of the survey. In the case of square meter (Average) alarms the meter grid coordinates are given.

ATTACHMENT 1 - RADIATION/CONTAMINATION SURVEY FORM

DATE: 1-13-11	TIME: 1400	INSTRUMENTATION USED				
SURVEY NUMBER: AP-017-11	Model no./Det.	Serial Number	Calibration Due Date	% Efficiency	MDC/MDA (dpm/100cm ²)	401-13-11 Background (dpm/100cm ²)
LOCATION: BS SU 37	222/w/	183984	2-15-11	NA	NA	cpm NA
SURVEYOR: Larry Casey	43-68	148835	2-15-11	10	NA	5
REVIEWED BY: <i>[Signature]</i>						
PHP/SPM: R.W. Durlin						

Isotopes of Concern: Ra 226

Description or drawing:

Investigation of SCM strips 76, 78, 80.
 Performed 2-minute counts from high voltage side, covering 4 ft over, for alpha.
 Max reading was 9cpm.

Investigation of FA3701B

Routine (Daily / Weekly / Monthly)	Non-routine	All radiation readings in $\mu\text{r/hr}$ unless otherwise noted. #denotes swipe location or fixed α/β readings. #denotes G/A radiation readings. #/#denotes contact / 1 meter radiation readings. "denotes highest radiation reading on contact. Δdenotes static location.
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