



**LA CROSSE BOILING WATER REACTOR  
FINAL STATUS SURVEY RELEASE RECORD**

**LACBWR ADMINISTRATION BUILDING  
SURVEY UNIT B2-010-103**



PREPARED BY / DATE: *P. Giza* 12/12/2019  
P. Giza, Radiological Engineer

REVIEWED BY / DATE: *R. F. Yetter III* 12/12/19  
R. F. Yetter III, FSS Specialist

REVIEWED BY / DATE: *R. Yetter* 12/12/19  
R. Yetter, Director, Radiological Site Closure

REVIEWED BY / DATE: *P. Hollenbeck* 12/12/19  
P. Hollenbeck, Radiological Engineer

APPROVED BY / DATE: *S. Zoller* 12/12/19  
S. Zoller, FSS Manager

## **TABLE OF CONTENTS**

<b>1. EXECUTIVE SUMMARY .....</b>	<b>5</b>
<b>2. SURVEY UNIT DESCRIPTION .....</b>	<b>5</b>
<b>3. CLASSIFICATION BASIS.....</b>	<b>6</b>
<b>4. DATA QUALITY OBJECTIVES (DQO).....</b>	<b>7</b>
<b>5. SURVEY DESIGN.....</b>	<b>10</b>
<b>6. SURVEY IMPLEMENTATION .....</b>	<b>16</b>
<b>7. SURVEY RESULTS.....</b>	<b>17</b>
<b>8. QUALITY CONTROL.....</b>	<b>28</b>
<b>9. INVESTIGATIONS AND RESULTS .....</b>	<b>29</b>
<b>10. REMEDIATION AND RESULTS .....</b>	<b>29</b>
<b>11. CHANGES FROM THE FINAL STATUS SURVEY PLAN .....</b>	<b>29</b>
<b>12. DATA QUALITY ASSESSMENT (DQA).....</b>	<b>29</b>
<b>13. ANOMALIES.....</b>	<b>30</b>
<b>14. CONCLUSION .....</b>	<b>30</b>
<b>15. REFERENCES.....</b>	<b>30</b>
<b>16. ATTACHMENTS .....</b>	<b>30</b>
<i>ATTACHMENT 1 – FIGURES AND MAPS.....</i>	<i>32</i>
<i>ATTACHMENT 2 – SCAN DATA.....</i>	<i>40</i>
<i>ATTACHMENT 3 – SIGN TEST.....</i>	<i>46</i>
<i>ATTACHMENT 4 – QUALITY CONTROL ASSESSMENT.....</i>	<i>51</i>
<i>ATTACHMENT 5 – GRAPHICAL PRESENTATIONS.....</i>	<i>53</i>
<i>ATTACHMENT 6 – LUDLUM 2350-1 DOWNLOAD REPORTS.....</i>	<i>57</i>

## **LIST OF TABLES**

Table 4-1 - Dose Significant Radionuclides and Mixture for Above Grade Buildings .....	8
Table 4-2 - Base Case DCGLs for Above Grade Buildings (DCGL <sub>AGB</sub> ) .....	9
Table 4-3 - Operational DCGLs for Above Grade Buildings (OpDCGL <sub>AGB</sub> ) .....	10
Table 5-1 - Survey Unit B2-010-103 Measurement Designations.....	12
Table 5-2 - Investigation Levels .....	15
Table 5-3 - Synopsis of Survey Design.....	16
Table 7-1 - Synopsis of Scan Results .....	18
Table 7-2 - Detector Efficiencies .....	23
Table 7-3 - Summary of Systematic, Judgmental, and QC Static Measurements .....	23
Table 7-4 - Basic Statistical Properties of Systematic Measurement Population .....	28
Table 16-1 - Survey Unit B2-010-103 Complete Scan Data .....	41
Table 16-2 - Survey Unit B2-010-103 Sign Test.....	47
Table 16-3 - Survey Unit B2-010-103 QC Assessment .....	52

## **LIST OF FIGURES**

Figure 16-1 - Survey Unit B2-010-103 Exterior Systematic and Judgmental Measurement Locations Map ....	33
Figure 16-2 - Survey Unit B2-010-103 Interior First Floor Systematic Measurement Locations Map.....	34
Figure 16-3 - Survey Unit B2-010-103 Interior First Floor Ceiling Systematic Measurement Locations Map.	35
Figure 16-4 - Survey Unit B2-010-103 Interior First Floor Wall Systematic Measurement Locations Map.....	36
Figure 16-5 - Survey Unit B2-010-103 Interior 2 <sup>nd</sup> Floor Systematic and Judgmental Measurement Locations Map .....	37
Figure 16-6 - Survey Unit B2-010-103 Interior 2 <sup>nd</sup> Floor Ceiling Systematic and Judgmental Measurement Locations Map.....	38
Figure 16-7 - Survey Unit B2-010-103 Interior 2 <sup>nd</sup> Floor Wall Systematic and Judgmental Measurement Locations Map.....	39
Figure 16-8 - Quantile Plot for Gross Activity .....	54
Figure 16-9 - Histogram for Gross Activity .....	55
Figure 16-10 - Retrospective Power Curve .....	56

---

---

**LIST OF ACRONYMS AND ABBREVIATIONS**

ALARA	As Low As Reasonably Achievable
ASP	Alarm Set Point
DQA	Data Quality Assessment
DQO	Data Quality Objective
DCGL	Derived Concentration Guideline Level
DCGL <sub>AGB</sub>	Above Grade Building Derived Concentration Guideline Level
FSS	Final Status Survey
GPS	Global Positioning System
HSA	Historical Site Assessment
IC	Insignificant Contributors
LACBWR	La Crosse Boiling Water Reactor
LBGR	Lower Bound of the Gray Region
LTP	License Termination Plan
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDC	Minimum Detectable Concentration
MDCR	Minimal Detectable Count Rate
OpDCGL <sub>AGB</sub>	Above Grade Building Operational Derived Concentration Guideline Level
QAPP	Quality Assurance Project Plan
QC	Quality Control
ROC	Radionuclides of Concern
SOF	Sum-of-Fraction
TEDE	Total Effective Dose Equivalent
UBGR	Upper Bound of the Gray Region
UCL	Upper Confidence Limit
URS	Unconditional Release Survey
USNRC	United States Nuclear Regulatory Commission

## 1. EXECUTIVE SUMMARY

This Final Status Survey (FSS) Release Record for survey unit B2-010-103, *La Crosse Boiling Water Reactor* (LACBWR) Administration Building, has been generated in accordance with LaCrosseSolutions procedure LC-FS-PR-009, *Final Status Survey Data Reporting* (Reference 1) and satisfies the requirements of Section 5.11 of the *La Crosse Boiling Water Reactor License Termination Plan* (LACBWR LTP) (Reference 2).

An FSS sample plan for this survey unit was developed in accordance with LaCrosseSolutions procedures LC-FS-PR-015, *Final Status Surveys for Structures* (Reference 3), LC-FS-PR-002 and *Final Status Survey Package Development* (Reference 4), the LACBWR LTP, and with guidance from NUREG-1575, Revision 1, *Multi-Agency Radiation Survey and Site Investigation Manual* (MARSSIM) (Reference 5).

This above grade building survey unit has a MARSSIM classification of 2. A survey plan was designed based upon use of the Sign Test as the nonparametric statistical test for compliance. Both the Type I ( $\alpha$ ) and Type II ( $\beta$ ) decision error rates were set at 0.05. As a systematic measurement population, one hundred and twelve (112) static beta measurements were acquired from the survey unit. In addition, surface scanning was performed on approximately 25% of the total surface area in the survey unit. The data assessment results for survey unit B2-010-103 indicate that the maximum gross activity among systematic measurements is equal to 1,199 dpm/100 cm<sup>2</sup>, which is 37.93% of the Adjusted Gross Operational Derived Concentration Guideline Level (DCGL) for above grade buildings (see Section 5 of this release record for the calculations of adjusted gross DCGLs). Therefore, the null hypothesis of the Sign test is rejected, and survey unit B2-010-103 is acceptable for unrestricted release. The mean gross activity among systematic measurements is equal to 113 dpm/100 cm<sup>2</sup>, which is 0.57% of the Adjusted Gross Base Case DCGL. Multiplying this fraction by 25 mrem/yr results in a dose for the survey unit of 0.1426 mrem/yr.

## 2. SURVEY UNIT DESCRIPTION

B2-010-103 is an impacted Class 2 above grade building survey unit. The facility has historically been used for office space and records storage. It also housed an environmental lab to support the LACBWR and Genoa 3 Coal Plant operations. The total surface area of the survey unit is approximately 5,433 m<sup>2</sup>. Refer to Attachment 1 of this report for figures and maps depicting survey unit B2-010-103.



### 3. CLASSIFICATION BASIS

Based on the *La Crosse Boiling Water Reactor Historical Site Assessment* (HSA) (Reference 6), survey unit B2-010-103 was identified as a Class 2 structure survey unit. There are no documented incidents of identified radioactive contamination, radioactive material spills or the use of unsealed radioactive sources in the LACBWR Administration Building. The Administration Building was classified as a Class 2 structure due to its proximity to the LACBWR Site Enclosure (LSE) and its previous occupancy by LACBWR facility workers. In addition, the building had equipment used to conduct whole-body counts.

A characterization survey for the LACBWR Administration Building was performed in 2014, as documented in GG-EO-313196-RS-RP-001, *Characterization Survey Report for La Crosse Boiling Water Reactor* (Reference 7). The initial survey design for characterization did not call for beta scanning or biased direct alpha/beta measurements; however, following the discovery of a discrete particle on the second floor of the building, additional surveys were performed. Beta scans were conducted on 50% of the accessible floor surfaces in hallways and rooms. Additionally, biased direct alpha/beta and gamma measurements, with a focus on surface areas in rooms and hallways which were stained, discolored, or disturbed, were performed. Beta scans on 10% of the roof surfaces, as well as the acquisition of six (6) random direct and removable contamination samples, were conducted. The roof was surveyed to evaluate the potential for the large, flat, and elevated open air surface to be potentially impacted by atmospheric dispersion of radioactive contamination from past LACBWR operations. The survey plan originally called for obtaining two (2) representative samples of sediments from drain lines in the facility. However, this was not accomplished as the cleanout areas of the drain systems were not readily accessible without excavation. As an alternative, floor and sink drains in the mechanical rooms, environmental lab, and a restroom were surveyed, with direct and removable contamination surveys for alpha and beta/gamma. The results of the beta scans of carpet, laminated wood, and 12" by 12" tile surfaces inside the structure ranged from 1,420 dpm/100 cm<sup>2</sup> to 2,710 dpm/100 cm<sup>2</sup> with a scan MDC of 2,000 dpm/100cm<sup>2</sup>. The results of beta scans of glazed type tiles located on the first floor, in and around the access control area, ranged from 3,876 dpm/100 cm<sup>2</sup> to 4,915 dpm/100cm<sup>2</sup> with a scan MDC of 2,100dpm/100 cm<sup>2</sup>. Gamma spectroscopy was performed on a non-impacted sample of the glazed tile and it exhibited a significant presence of uranium and thorium NORM. Additionally, during the beta scan survey of the second floor, a small elevated area was noted outside an office location on 12" by 12" tiles which were subsequently quantified with a hand held beta-gamma detector direct measurement to show contamination levels

nearing 6,000 dpm/100 cm<sup>2</sup>. The area and its control were turned over to the licensee for management.

- The area of concern was verified to be a discrete radioactive particle (DRP) in the 12" by 12" tile that was removed by the licensee. The DRP was verified by the on-site gamma spectroscopy unit to be an approximately 0.005 uCi discrete particle containing Cs-137. A total of ten (10) direct biased direct surveys were subsequently taken on the first and second floor laminated wood, carpet, and 12" by 12" tile areas. The results of the surveys showed all the beta-gamma and alpha direct results were well below 50% of the action levels for structural surfaces.
- The two (2) direct beta-gamma and alpha measurements on the glazed tile results demonstrated that the beta-gamma were less than 50% of the action levels for structural surfaces but were elevated at higher levels due to the presence of NORM. The elevated alpha on the glazed tile were due to the tile's content of natural thorium and uranium series radionuclides.
- The scan survey results of 10% of the roof area indicated results ranging from 1,872 dpm/100 cm<sup>2</sup> to 2,261 dpm/100 cm<sup>2</sup>, which are well below 50% of the action level. The direct alpha measurements were elevated with an average measurement of 112 dpm/100 cm<sup>2</sup> and a maximum measurement of 152 dpm/100 cm<sup>2</sup>.

Direct and removable contamination surveys were performed on nine (9) sink and floor drains. The survey results indicated no residual radioactivity exceeding 50% of the structural surface action level. Results of the survey are presented in GG-EO-313196-RS-RP-001, *Characterization Survey Report for La Crosse Boiling Water Reactor*.

Based upon review of the historical information, the results of the characterization survey data, and completion of a final Survey Unit Classification Worksheet, the correct final classification of survey unit B2-010-103 was determined to be Class 2.

#### 4. DATA QUALITY OBJECTIVES

FSS planning and design relies on a properly executed Data Quality Objective (DQO) process to ensure, through compliance with explicitly defined inputs and boundaries, that the primary objective of the survey is satisfied. The DQO process, utilized in accordance with MARSSIM, is described in the LACBWR LTP. The appropriate design for a given survey was developed using the DQO process as outlined in Appendix D of MARSSIM.

The DQO process incorporated hypothesis testing and probabilistic sampling distributions to control decision errors during data analysis. Hypothesis testing is a process based on the scientific method that compares a baseline condition to an alternate condition. The baseline condition is technically known as the null hypothesis. Hypothesis testing rests on the



premise that the null hypothesis is true and that sufficient evidence must be provided for rejection. In designing the survey plan, the underlying assumption, or null hypothesis was that residual activity in the survey unit exceeded the release criteria. Rejection of the null hypothesis would indicate that residual activity within the survey unit does not exceed the release criteria. Therefore, the survey unit would satisfy the primary objective of the FSS sample plan.

The primary objective of the FSS sample plan is to demonstrate that the level of residual radioactivity in survey unit B2-010-103 did not exceed the release criteria specified in the LTP and that the potential dose from residual radioactivity is As Low As Reasonably Achievable (ALARA).

LaCrosseSolutions TSD RS-TD-313196-001, *Radionuclides of Concern during LACBWR Decommissioning* (Reference 8) established the basis for an initial suite of potential ROC for decommissioning. Insignificant contributors (IC) were determined consistent with the guidance contained in Section 3.3 of NUREG-1757, Volume 2, Revision 1, *Consolidated Decommissioning Guidance – Characterization, Survey, and Determination of Radiological Criteria, Final Report* (Reference 9). In all soil and concrete scenarios, Cs-137, Co-60, Sr-90, Eu-152 and Eu-154 contribute nearly 100% of the total dose. The remaining radionuclides were designated as IC and were eliminated from further detailed evaluation. Therefore, the final ROCs for LACBWR above grade buildings, soil, basement concrete, and buried piping are Cs-137, Co-60, Sr-90, Eu-152 and Eu-154.

The LTP, Section 6.14.1 discusses the process used to derive the ROC for the decommissioning of LACBWR, including the elimination of IC from the initial suite. Table 4-1 presents the ROC for the decommissioning of above grade buildings at LACBWR and the normalized mixture fractions based on the radionuclide mixture.

**Table 4-1 - Dose Significant Radionuclides and Mixture for Above Grade Buildings**

<b>Radionuclide</b>	<b>Fraction of Total Activity (normalized)<sup>(1)</sup></b>
Co-60	0.0644
Sr-90	0.0981
Cs-137	0.829
Eu-152	0.00549
Eu-154	0.00281

(1) Based on maximum percent of total activity from Table 22 of RS-TD-313196-001, normalized to one for the dose significant radionuclides.

LTP, Section 5.2 states that each radionuclide-specific Base Case DCGL is equivalent to the level of residual radioactivity (above background levels) that could, when considered independently, result in a Total Effective Dose Equivalent (TEDE) of 25 mrem/yr to an Average Member of the Critical Group. To ensure that the summation of dose from each source term is 25 mrem/yr or less after all FSS is completed, the Base Case DCGLs are reduced based on an expected, or *a priori*, fraction of the 25 mrem/yr dose limit from each source term. The reduced DCGLs, or “Operational” DCGLs, can be related to the Base Case DCGLs as an expected fraction of dose based on an *a priori* assessment of what the expected dose should be based on the results of site characterization, process knowledge, and the extent of planned remediation. The Operational DCGL is then used as the DCGL for the FSS design of the survey unit (calculation of surrogate DCGLs, investigations levels, etc.). Details of the Operational DCGLs derived for each dose component and the basis for the applied *a priori* dose fractions are provided in LC-FS-TSD-002, *Operational Derived Concentration Guideline Levels for Final Status Survey* (Reference 10).

At LACBWR, compliance is demonstrated through the summation of dose from five (5) distinct source terms (i.e., basements, soils, buried pipe, above grade buildings, and groundwater) for the end-state. When applied to above grade buildings, the DCGLs are expressed in units of activity per surface area (dpm/100 cm<sup>2</sup>).

The Screening Values in NUREG-1757, Volume 2, Revision 1, *Consolidated Decommissioning Guidance – Characterization, Survey, and Determination of Radiological Criteria, Final Report*, Table H-1, are applied to the FSS of above grade buildings. The Table H-1 Screening Values are presented as Base Case DCGLs (equivalent to 25 mrem/yr) and are reproduced in Table 4-2 below.

**Table 4-2 - Base Case DCGLs for Above Grade Buildings (DCGL<sub>AGB</sub>)**

<b>Radionuclide</b>	<b>DCGL<sub>AGB</sub> (dpm/100cm<sup>2</sup>)</b>
Co-60	7,100
Sr-90	8,700
Cs-137	28,000
Eu-152	12,700
Eu-154	11,500

The Operational DCGLs are then used as the DCGL for the FSS design of the survey unit (calculation of surrogate DCGLs, investigation levels, etc.). The Operational DCGLs for the unrestricted release of above grade buildings are provided in Table 4-3.

**Table 4-3 - Operational DCGLs for Above Grade Buildings (OpDCGL<sub>AGB</sub>)**

Radionuclide	OpDCGL <sub>AGB</sub> (dpm/100cm <sup>2</sup> )
Co-60	1,136
Sr-90	1,392
Cs-137	4,480
Eu-152	2,032
Eu-154	1,840

Instrument DQOs included a verification of the ability of the survey instrument to detect the radiation(s) of interest relative to the Operational DCGL. Survey instrument response checks were required prior to issuance and after the instrument had been used. Control and accountability of survey instruments was required to assure the quality and prevent the loss of data. The minimum acceptable MDC for measurements obtained using field instruments was 50% of the applicable Operational DCGL.

## 5. SURVEY DESIGN

The level of effort associated with planning a survey is based on the complexity of the survey unit and nature of the hazards. Guidance for preparing FSS plans is provided in procedures LC-FS-PR-015, *Final Status Surveys for Structures* and LC-FS-PR-002, *Final Status Survey Package Development*.

For the FSS of above grade buildings, Adjusted Gross DCGLs are calculated. This is done because radionuclide-specific data is not acquired with static measurements. The equation for calculating the Adjusted Gross DCGL is as follows:

**Equation 1**

$$DCGL_{AG} = \frac{1}{\left[ \left( \frac{f_1}{DCGL_1} \right) + \left( \frac{f_2}{DCGL_2} \right) + \dots \left( \frac{f_i}{DCGL_i} \right) \right]}$$

Where:  $DCGL_{AG}$  = Adjusted Gross DCGL in units of dpm/100 cm<sup>2</sup>  
 $DCGL_i$  = Gross DCGL for detectable radionuclide in units of dpm/100 cm<sup>2</sup>  
 $f_i$  = Mixture fraction of detectable radionuclides

Using Equation 1, and values within Tables 4-1 and 4-3, the Adjusted Gross Operational DCGL was calculated as follows:

#### Equation 2

$$OpDCGL_{AG} = \frac{1}{\left[ \left( \frac{0.0644}{1136_{(Co-60)}} \right) + \left( \frac{0.0981}{1392_{(Sr-90)}} \right) + \left( \frac{0.829}{4480_{(Cs-137)}} \right) + \left( \frac{0.00549}{2032_{(Eu-152)}} \right) + \left( \frac{0.00281}{1840_{(Eu-154)}} \right) \right]}$$

$$= 3160 \text{ dpm}/100 \text{ cm}^2$$

The Adjusted Gross Operational DCGL was calculated as 3,160 dpm/100 cm<sup>2</sup>, which was the action level for survey unit B2-010-103.

Using Equation 1, and values within Tables 4-1 and 4-2, the Adjusted Gross Base Case DCGL was calculated as follows:

#### Equation 3

$$BcDCGL_{AG} = \frac{1}{\left[ \left( \frac{0.0644}{7100_{(Co-60)}} \right) + \left( \frac{0.0981}{8700_{(Sr-90)}} \right) + \left( \frac{0.829}{28000_{(Cs-137)}} \right) + \left( \frac{0.00549}{12700_{(Eu-152)}} \right) + \left( \frac{0.00281}{11500_{(Eu-154)}} \right) \right]}$$

$$= 19751 \text{ dpm}/100 \text{ cm}^2$$

The Adjusted Gross Base Case DCGL was calculated as 19,751 dpm/100 cm<sup>2</sup>. The mean activity from the FSS systematic measurements is compared to the Adjusted Gross Base Case DCGL, and the dose contribution from the survey unit is calculated.

The Sign test was selected as the nonparametric statistical test for compliance with the release criteria. The number of measurements for use with the Sign test was determined in accordance with procedures LC-FS-PR-002 and LC-FS-PR-015. The relative shift ( $\Delta/\sigma$ ) for the survey unit data set is defined as shift ( $\Delta$ ), which is the Upper Boundary of the Gray Region (UBGR), or the DCGL, minus the Lower Bound of the Gray Region (LBGR), divided by sigma ( $\sigma$ ), which is the standard deviation of the data set used for survey design. The optimal value for  $\Delta/\sigma$  should range between one (1) and three (3). The largest value the  $\Delta/\sigma$  can have is three (3). If the calculated value of  $\Delta/\sigma$  exceeds three (3), an adjusted value of three (3) will be used for  $\Delta/\sigma$ . The  $\Delta/\sigma$  for survey unit B2-010-103, based on data from characterization of the LACBWR Administration Building, was calculated as follows:

#### Equation 4

$$\Delta/\sigma = 3160/518 = 5.16$$

As the calculated relative shift was greater than three (3), a value of three (3) was used as the adjusted  $\Delta/\sigma$ . Both the Type I error (i.e.,  $\alpha$  value) and the Type II error (i.e.,  $\beta$  value) was set at 0.05. The sample size from Table 5.5 of MARSSIM that equates to the Type I and Type II error of 0.05 for use with the Sign test is an N value of fourteen (14). One hundred and twelve (112) total systematic measurements (84 interior and 28 exterior) were included in the survey design for survey unit B2-010-103. This was done because the total surface area of the survey unit surpasses the recommended Class 2 structure survey unit size from Table 1 in MARSSIM. The survey unit was split into eight (8) areas, with 14 required compliance measurements each, to accommodate the MARSSIM recommended survey unit size restrictions.

A Prospective Power Curve was generated using COMPASS, a software package developed under the sponsorship of the United States Nuclear Regulatory Commission (USNRC) for implementation of the MARSSIM in support of the decommissioning license termination rule (10CFR20, Subpart E). The result of the COMPASS computer run showed adequate power for the survey design.

As the survey unit was designated Class 2, measurement locations were selected based on a systematic grid with a random starting point. The systematic locations of the static measurements were selected using Visual Sample Plan (VSP). Input parameters included the use of survey unit drawings and the systematic sampling tool set with a predetermined number of measurement locations. The systematic measurement locations were identified in the field using dimension parameters provided on the survey unit map (see Attachment 1). Table 5-1 lists the systematic, judgmental, and QC measurements collected for FSS of survey unit B2-010-103.

**Table 5-1 – Survey Unit B2-010-103 Measurement Designations**

Measurement ID	
B2-010-103-FSFO-A01-BD	B2-010-103-FSWO-F11-BD
B2-010-103-FSFO-A02-BD	B2-010-103-FSWO-F12-BD
B2-010-103-FSFO-A03-BD	B2-010-103-FSWO-F13-BD
B2-010-103-FSFO-A04-BD	B2-010-103-FSWO-F14-BD
B2-010-103-FSFO-A05-BD	B2-010-103-FSRO-G01-BD
B2-010-103-FSFO-A06-BD	B2-010-103-FSRO-G02-BD
B2-010-103-FSFO-A07-BD	B2-010-103-FSRO-G03-BD
B2-010-103-FSFO-A08-BD	B2-010-103-FSRO-G04-BD
B2-010-103-FSFO-A09-BD	B2-010-103-FSRO-G05-BD
B2-010-103-FSFO-A10-BD	B2-010-103-FSRO-G06-BD

Measurement ID	
B2-010-103-FSFO-A11-BD	B2-010-103-FSRO-G07-BD
B2-010-103-FSFO-A12-BD	B2-010-103-FSRO-G08-BD
B2-010-103-FSFO-A13-BD	B2-010-103-FSRO-G09-BD
B2-010-103-FSFO-A14-BD	B2-010-103-FSRO-G10-BD
B2-010-103-FSCC-B01-BD	B2-010-103-FSWO-G11-BD
B2-010-103-FSCC-B02-BD	B2-010-103-FSRO-G12-BD
B2-010-103-FSCC-B03-BD	B2-010-103-FSWO-G13-BD
B2-010-103-FSCC-B04-BD	B2-010-103-FSRO-G14-BD
B2-010-103-FSCC-B05-BD	B2-010-103-FSRO-H01-BD
B2-010-103-FSCC-B06-BD	B2-010-103-FSRO-H02-BD
B2-010-103-FSCC-B07-BD	B2-010-103-FSRO-H03-BD
B2-010-103-FSCM-B08-BD	B2-010-103-FSRO-H04-BD
B2-010-103-FSCM-B09-BD	B2-010-103-FSRO-H05-BD
B2-010-103-FSCM-B10-BD	B2-010-103-FSWO-H06-BD
B2-010-103-FSCM-B11-BD	B2-010-103-FSWO-H07-BD
B2-010-103-FSCM-B12-BD	B2-010-103-FSWO-H08-BD
B2-010-103-FSCM-B13-BD	B2-010-103-FSWO-H09-BD
B2-010-103-FSCM-B14-BD	B2-010-103-FSWO-H10-BD
B2-010-103-FSWB-C01-BD	B2-010-103-FSWO-H11-BD
B2-010-103-FSWO-C02-BD	B2-010-103-FSWO-H12-BD
B2-010-103-FSWB-C03-BD	B2-010-103-FSWO-H13-BD
B2-010-103-FSWB-C04-BD	B2-010-103-FSWO-H14-BD
B2-010-103-FSWB-C05-BD	B2-010-103-FQFO-A09-BD
B2-010-103-FSWO-C06-BD	B2-010-103-FQCM-B13-BD
B2-010-103-FSWB-C07-BD	B2-010-103-FQWB-C13-BD
B2-010-103-FSWB-C08-BD	B2-010-103-FQFO-D02-BD
B2-010-103-FSWB-C09-BD	B2-010-103-FQFO-A21-BD
B2-010-103-FSWO-C10-BD	B2-010-103-FQFC-D20-BD
B2-010-103-FSWB-C11-BD	B2-010-103-FQSM-B16-BD
B2-010-103-FSWB-C12-BD	B2-010-103-FQSM-E19-BD
B2-010-103-FSWB-C13-BD	B2-010-103-FQSM-B21-BD
B2-010-103-FSWB-C14-BD	B2-010-103-FJFO-A15-BD



Measurement ID	
B2-010-103-FSFO-D01-BD	B2-010-103-FJFO-A16-BD
B2-010-103-FSFO-D02-BD	B2-010-103-FJFO-A17-BD
B2-010-103-FSFO-D03-BD	B2-010-103-FJFO-A18-BD
B2-010-103-FSFO-D04-BD	B2-010-103-FJFO-A19-BD
B2-010-103-FSFO-D05-BD	B2-010-103-FJCM-B15-BD
B2-010-103-FSFW-D06-BD	B2-010-103-FJWB-C15-BD
B2-010-103-FSFW-D07-BD	B2-010-103-FJFO-D15-BD
B2-010-103-FSFO-D08-BD	B2-010-103-FJFO-D18-BD
B2-010-103-FSFO-D09-BD	B2-010-103-FJFO-D19-BD
B2-010-103-FSFO-D10-BD	B2-010-103-FJFO-A21-BD
B2-010-103-FSFO-D11-BD	B2-010-103-FJFO-A22-BD
B2-010-103-FSFO-D12-BD	B2-010-103-FJFO-A23-BD
B2-010-103-FSFO-D13-BD	B2-010-103-FJFO-D20-BD
B2-010-103-FSFO-D14-BD	B2-010-103-FJFO-D21-BD
B2-010-103-FSCO-E01-BD	B2-010-103-FJCM-E06-BD
B2-010-103-FSCO-E02-BD	B2-010-103-FJCM-E15-BD
B2-010-103-FSCO-E03-BD	B2-010-103-FJWO-F05-BD
B2-010-103-FSCO-E04-BD	B2-010-103-FJWO-F15-BD
B2-010-103-FSCO-E05-BD	B2-010-103-FJSO-C16-BD
B2-010-103-FSCM-E06-BD	B2-010-103-FJRO-G06-BD
B2-010-103-FSCM-E07-BD	B2-010-103-FJWO-G15-BD
B2-010-103-FSCM-E08-BD	B2-010-103-FJWO-H08-BD
B2-010-103-FSCM-E09-BD	B2-010-103-FJWO-H15-BD
B2-010-103-FSCM-E10-BD	B2-010-103-FJSC-A16-BD
B2-010-103-FSCM-E11-BD	B2-010-103-FJSC-D16-BD
B2-010-103-FSCM-E12-BD	B2-010-103-FJSM-B16-BD
B2-010-103-FSCM-E13-BD	B2-010-103-FJSM-B17-BD
B2-010-103-FSCM-E14-BD	B2-010-103-FJSM-B18-BD
B2-010-103-FSWO-F01-BD	B2-010-103-FJSM-B19-BD
B2-010-103-FSWO-F02-BD	B2-010-103-FJSM-B20-BD
B2-010-103-FSWO-F03-BD	B2-010-103-FJSM-B21-BD
B2-010-103-FSWO-F04-BD	B2-010-103-FJSM-B22-BD

Measurement ID	
B2-010-103-FSWO-F05-BD	B2-010-103-FJSM-E16-BD
B2-010-103-FSWO-F06-BD	B2-010-103-FJSM-E17-BD
B2-010-103-FSWO-F07-BD	B2-010-103-FJSM-E18-BD
B2-010-103-FSWO-F08-BD	B2-010-103-FJSM-E19-BD
B2-010-103-FSWO-F09-BD	B2-010-103-FJSM-E20-BD
B2-010-103-FSWO-F10-BD	B2-010-103-FJSM-E21-BD

The implementation of quality control measures as referenced in LTP, Section 5.9 and LaCrosseSolutions LC-QA-PN-001, *Final Status Survey Quality Assurance Project Plan* (QAPP) (Reference 11) includes the collection of a replicate measurement on 5% of the measurements collected in a survey unit, with the locations selected at random. Thirteen (13) replicate measurements, B2-010-103-FQFO-A09-BD, B2-010-103-FQCM-B13-BD, B2-010-103-FQWB-C13-BD, B2-010-103-FQFO-D02-BD, B2-010-103-FQCM-E06-BD, B2-010-103-FQWO-F05-BD, B2-010-103-FQRO-G06-BD, B2-010-103-FQWO-H08-BD, B2-010-103-FQFO-A21-BD, B2-010-103-FQFC-D20-BD, B2-010-103-FQSM-B16-BD, B2-010-103-FQSM-E19-BD, and B2-010-103-FQSM-B21-BD were selected at random for the QC replicate measurement analysis for the FSS of this survey unit.

The LTP, Section 5.6.4.4 and Table 5-15 specifies that for Class 2 structure survey units, systematic and judgmental surface scans will be performed on 10% to 100% of the surface area in the survey unit. For survey unit B2-010-103, 25% scan coverage was selected for the floor and walls, and 10% coverage was selected for the ceilings. This coverage equates to total scan coverage of 1,230 m<sup>2</sup>. One hundred and forty-seven (147) scan areas (one [1] scan area at each systematic measurement location and thirty-five [35] judgmental scan areas), equating to 1,345 m<sup>2</sup>, were established. Refer to Attachment 1 for figures and maps depicting the measurement and scan locations in survey unit B2-010-103.

For this Class 2 structure survey unit, the “Investigation Levels” for area scanning and direct measurement results are those levels specified in the LTP, Table 5-16, and are reproduced below in Table 5-2.

**Table 5-2 – Investigation Levels**

Classification	Scan Investigation Levels	Direct Investigation Levels
Class 2	>Operational DCGL or >MDC <sub>scan</sub> if MDC <sub>scan</sub> is greater than Operational DCGL	>Operational DCGL

Table 5-3 provides a synopsis of the survey design for survey unit B2-010-103.

**Table 5-3 – Synopsis of Survey Design**

Feature	Design Criteria	Basis
Survey Unit Surface Area	5,433m <sup>2</sup>	Building Dimensions
Number of Systematic Measurements (N)	112	<ul style="list-style-type: none"> <li>• <math>\sigma = 518</math></li> <li>• UBGR = 3,160</li> <li>• LBGR = 489</li> <li>• Type I &amp; II error = 0.05</li> <li>• <math>\Delta/\sigma = 3</math> (adjusted)</li> <li>• MARSSIM Table 5.5</li> </ul>
DCGL/Action Level	3,160 dpm/100 cm <sup>2</sup>	Adjusted Gross Operational DCGL (Equation 2)
Direct Investigation Level	>Operational DCGL	LTP, Table 5-16
Scan Investigation Level	>Operational DCGL or >MDC <sub>scan</sub>	LTP, Table 5-16
Scan Areal Coverage	1,345 m <sup>2</sup> (112 systematic and 35 judgmental scan areas) or ~25%	LTP, Table 5-15 Actual Scan Coverage
Judgmental Measurements	8 35	Per Survey Design Actual Number Obtained
QC	8 replicate measurements selected at random locations 13	LTP, Section 5.9 Actual Number Obtained

## 6. SURVEY IMPLEMENTATION

For survey unit B2-010-103, compliance with the unrestricted release criteria was demonstrated through a combination of surface scanning and surface static measurements with a Ludlum Model 44-116 beta/gamma detector.

An FSS Supervisor performed a visual inspection and walk-down of the survey unit during the Unconditional Release Survey (URS) that was performed prior to FSS. The purpose of the walk-down was to assess the physical condition of the survey unit, evaluate access points and travel paths, and identify potentially hazardous conditions. At the time of FSS, the interior and exterior of the building was dry and reasonably free of debris. No conditions prohibited the proper collection of static and scan measurements.

FSS field activities were conducted under the FSS Sample Plan, which included DQOs, survey design, detailed FSS instructions, job safety analysis, and related procedures for reference. FSS field activities were projected to take four (4) working days to complete. Daily briefings were conducted to discuss the expectations for job performance and to review safety aspects of the job. A "Field Log" was used to document field activities and other information pertaining to the performance of the FSS. FSS field activities commenced on October 9, 2019, and were concluded on October 16, 2019.

A total of one hundred and forty-seven (147) different scan areas, constituting an areal coverage of 1,345 m<sup>2</sup> were scanned using a Ludlum 2350-1 paired with a Ludlum Model 44-116 detector (125 cm<sup>2</sup> detector area). The background was established as the average of five (5) 1-minute static measurements, while maintaining the detector waist high. In survey unit B2-010-103, background ranged from 195 cpm up to 400 cpm.

All designated scan areas were scanned using a Ludlum 2350-1 paired with a Model 44-116 beta/gamma detector operated in the rate-meter mode and using audio response. The probe was positioned as close to the surface as possible and was moved at a scan speed of approximately one (1) detector width per second. Scan MDC was sufficient to detect residual radioactivity at the action level of 3,160 dpm/100cm<sup>2</sup> (Adjusted Gross Operational DCGL). Complete scan results are provided in Attachment 2.

The one hundred and twelve (112) systematic static measurement locations were marked based on the dimensions provided on the survey map. Thirty-five (35) judgmental measurement locations were selected and marked as per the sample plan. Using the Ludlum 2350-1 paired with a Model 44-116 detector, a 1-minute static measurement was acquired at the location of highest scan indication within each systematic and judgmental scan area.

The implementation of survey specific QC measures included the collection of eight (8) replicate static measurements for QC analysis.

## **7. SURVEY RESULTS**

All areas identified in the FSS plan were scanned for elevated activity levels. No alarms were produced during the scanning of survey unit B2-010-103. Table 7-1 provides an overview of the scan results. Complete scan results are provided in Attachment 2.

**Table 7-1 – Synopsis of Scan Results**

<b>Scan Area</b>	<b>Highest Logged Reading (cpm)</b>	<b>Action Level<sup>(1)</sup> (cpm)</b>	<b># of Scan Alarms</b>	<b>Investigation Measurements</b>
A01	576	592	0	0
A02	550	592	0	0
A03	589	592	0	0
A04	735	820	0	0
A05	568	592	0	0
A06	587	592	0	0
A07	503	592	0	0
A08	573	592	0	0
A09	436	592	0	0
A09 QC	343	578	0	0
A10	813	820	0	0
A11	817	820	0	0
A12	546	592	0	0
A13	562	592	0	0
A14	533	592	0	0
A15J	505	592	0	0
A17	757	775	0	0
A18	560	775	0	0
A19	435	475	0	0
A20	436	475	0	0
B01	424	673	0	0
B02	330	673	0	0
B03	395	673	0	0
B04	314	673	0	0
B05	384	673	0	0
B06	497	673	0	0
B07	380	673	0	0
B08	545	668	0	0
B09	593	668	0	0
B10	620	668	0	0
B11	622	668	0	0
B12	556	668	0	0
B13	499	668	0	0

Scan Area	Highest Logged Reading (cpm)	Action Level <sup>(1)</sup> (cpm)	# of Scan Alarms	Investigation Measurements
B13 QC	474	537	0	0
B14	606	668	0	0
B15J	566	673	0	0
C01	656	670	0	0
C02	612	670	0	0
C03	540	670	0	0
C04	536	670	0	0
C05	622	670	0	0
C06	538	670	0	0
C07	574	670	0	0
C08	591	732	0	0
C09	682	732	0	0
C10	731	732	0	0
C11	731	732	0	0
C12	678	732	0	0
C13	682	732	0	0
C13 QC	421	578	0	0
C14	647	732	0	0
C15	706	732	0	0
D01	443	497	0	0
D02	492	497	0	0
D02 QC	371	656	0	0
D03	395	497	0	0
D04	454	476	0	0
D05	469	476	0	0
D06	428	497	0	0
D07	475	497	0	0
D08	517	581	0	0
D09	525	581	0	0
D10	514	581	0	0
D11	478	497	0	0
D12	473	497	0	0
D13	491	497	0	0
D14	476	497	0	0



Scan Area	Highest Logged Reading (cpm)	Action Level <sup>(1)</sup> (cpm)	# of Scan Alarms	Investigation Measurements
D15	480	497	0	0
D18	718	775	0	0
D19	639	775	0	0
DR01	476	635	0	0
DR01 QC	350	612	0	0
DR02	337	635	0	0
DR03	296	635	0	0
DR04	304	635	0	0
DR05	430	635	0	0
DR20 QC	326	542	0	0
E01	253	542	0	0
E02	327	542	0	0
E03	255	542	0	0
E04	262	542	0	0
E05	245	542	0	0
E06	238	537	0	0
E06 QC	426	507	0	0
E07	255	537	0	0
E08	286	537	0	0
E09	286	537	0	0
E10	265	537	0	0
E11	275	537	0	0
E12	220	537	0	0
E13	224	537	0	0
E14	267	537	0	0
E15	297	537	0	0
F01	606	607	0	0
F02	526	607	0	0
F03	581	607	0	0
F04	575	607	0	0
F05	603	607	0	0
F05 QC	543	656	0	0
F06	586	607	0	0
F07	596	607	0	0

Scan Area	Highest Logged Reading (cpm)	Action Level <sup>(1)</sup> (cpm)	# of Scan Alarms	Investigation Measurements
F08	586	607	0	0
F09	606	607	0	0
F10	568	571	0	0
F11	504	571	0	0
F12	476	628	0	0
F13	530	571	0	0
F14	546	571	0	0
F15	548	571	0	0
FH01	450	520	0	0
G01	411	564	0	0
G02	353	564	0	0
G03	434	564	0	0
G04	372	547	0	0
G05	388	547	0	0
G06	404	547	0	0
G06 QC	546	629	0	0
G07	373	547	0	0
G08	376	547	0	0
G09	406	547	0	0
G10	349	547	0	0
G11	424	547	0	0
G12	423	547	0	0
G13	336	629	0	0
G14	353	629	0	0
G15	347	629	0	0
H01	542	564	0	0
H02	535	564	0	0
H03	505	564	0	0
H04	529	564	0	0
H05	480	564	0	0
H06	381	627	0	0
H07	394	627	0	0
H08	298	627	0	0
H08 QC	550	629	0	0

Scan Area	Highest Logged Reading (cpm)	Action Level <sup>(1)</sup> (cpm)	# of Scan Alarms	Investigation Measurements
H09	358	627	0	0
H10	392	627	0	0
H11	367	627	0	0
H12	370	627	0	0
H13	414	627	0	0
H14	365	627	0	0
H15	425	627	0	0
SK07	458	520	0	0
SK08	450	520	0	0
VT01	448	520	0	0
VT01 QC	303	612	0	0
VT02	472	520	0	0
VT03	438	520	0	0
VT03 QC	304	572	0	0
VT04	459	520	0	0
VT05	462	520	0	0
VT06	458	520	0	0
VT07	470	520	0	0
VT08	484	520	0	0
VT09	491	520	0	0
VT10	473	520	0	0
VT11	513	520	0	0
VT12	379	520	0	0
VT13	405	520	0	0
VT22 QC	356	612	0	0

(1) Action Level for scanning was conservatively based on the average background plus 50% of the Operational DCGL converted to cpm using the detector efficiency.

Ambient background was subtracted from all measurements, then were converted from cpm to dpm/100 cm<sup>2</sup> (net cpm divided by detector efficiency) for direct comparison to the Adjusted Gross DCGLs. Table 7-2 below presents the detector efficiencies used for conversions. A summary of the results for the one hundred and twelve (112) systematic static measurements, thirty-five (35) judgmental static measurements, and thirteen (13) QC static measurements is provided in Table 7-3. The basic statistics for the systematic measurement population are summarized in Table 7-4.

**Table 7-2 – Detector Efficiencies**

<b>44-116 Detector #</b>	<b>Efficiency (c/d)</b>
222981	0.1653
223244	0.1698
357009	0.2104
357439	0.2169

**Table 7-3 - Summary of Systematic, Judgmental, and QC Static Measurements**

<b>Measurement ID</b>	<b>Gross Activity (dpm/100 cm<sup>2</sup>)</b>	<b>Fraction of Adjusted Gross OpDCGL</b>
B2-010-103-FSFO-A01-BD	0	0.0000
B2-010-103-FSFO-A02-BD	200	0.0632
B2-010-103-FSFO-A03-BD	0	0.0000
B2-010-103-FSFO-A04-BD	0	0.0000
B2-010-103-FSFO-A05-BD	452	0.1429
B2-010-103-FSFO-A06-BD	5	0.0015
B2-010-103-FSFO-A07-BD	0	0.0000
B2-010-103-FSFO-A08-BD	0	0.0000
B2-010-103-FSFO-A09-BD	38	0.0120
B2-010-103-FSFO-A10-BD	0	0.0000
B2-010-103-FSFO-A11-BD	0	0.0000
B2-010-103-FSFO-A12-BD	190	0.0602
B2-010-103-FSFO-A13-BD	200	0.0632
B2-010-103-FSFO-A14-BD	0	0.0000
B2-010-103-FSCC-B01-BD	0	0.0000
B2-010-103-FSCC-B02-BD	0	0.0000
B2-010-103-FSCC-B03-BD	0	0.0000
B2-010-103-FSCC-B04-BD	0	0.0000
B2-010-103-FSCC-B05-BD	147	0.0466
B2-010-103-FSCC-B06-BD	0	0.0000
B2-010-103-FSCC-B07-BD	0	0.0000
B2-010-103-FSCM-B08-BD	0	0.0000
B2-010-103-FSCM-B09-BD	0	0.0000

Measurement ID	Gross Activity (dpm/100 cm <sup>2</sup> )	Fraction of Adjusted Gross OpDCGL
B2-010-103-FSCM-B10-BD	0	0.0000
B2-010-103-FSCM-B11-BD	0	0.0000
B2-010-103-FSCM-B12-BD	0	0.0000
B2-010-103-FSCM-B13-BD	0	0.0000
B2-010-103-FSCM-B14-BD	0	0.0000
B2-010-103-FSWB-C01-BD	0	0.0000
B2-010-103-FSWO-C02-BD	0	0.0000
B2-010-103-FSWB-C03-BD	0	0.0000
B2-010-103-FSWB-C04-BD	0	0.0000
B2-010-103-FSWB-C05-BD	0	0.0000
B2-010-103-FSWO-C06-BD	0	0.0000
B2-010-103-FSWB-C07-BD	0	0.0000
B2-010-103-FSWB-C08-BD	0	0.0000
B2-010-103-FSWB-C09-BD	0	0.0000
B2-010-103-FSWO-C10-BD	0	0.0000
B2-010-103-FSWB-C11-BD	0	0.0000
B2-010-103-FSWB-C12-BD	0	0.0000
B2-010-103-FSWB-C13-BD	0	0.0000
B2-010-103-FSWB-C14-BD	76	0.0241
B2-010-103-FSFO-D01-BD	0	0.0000
B2-010-103-FSFO-D02-BD	0	0.0000
B2-010-103-FSFO-D03-BD	0	0.0000
B2-010-103-FSFO-D04-BD	0	0.0000
B2-010-103-FSFO-D05-BD	0	0.0000
B2-010-103-FSFW-D06-BD	0	0.0000
B2-010-103-FSFW-D07-BD	0	0.0000
B2-010-103-FSFO-D08-BD	0	0.0000
B2-010-103-FSFO-D09-BD	0	0.0000
B2-010-103-FSFO-D10-BD	0	0.0000
B2-010-103-FSFO-D11-BD	0	0.0000
B2-010-103-FSFO-D12-BD	0	0.0000
B2-010-103-FSFO-D13-BD	0	0.0000
B2-010-103-FSFO-D14-BD	0	0.0000

Measurement ID	Gross Activity (dpm/100 cm <sup>2</sup> )	Fraction of Adjusted Gross OpDCGL
B2-010-103-FSCO-E01-BD	106	0.0336
B2-010-103-FSCO-E02-BD	5	0.0015
B2-010-103-FSCO-E03-BD	41	0.0131
B2-010-103-FSCO-E04-BD	0	0.0000
B2-010-103-FSCO-E05-BD	51	0.0160
B2-010-103-FSCM-E06-BD	0	0.0000
B2-010-103-FSCM-E07-BD	0	0.0000
B2-010-103-FSCM-E08-BD	0	0.0000
B2-010-103-FSCM-E09-BD	0	0.0000
B2-010-103-FSCM-E10-BD	28	0.0088
B2-010-103-FSCM-E11-BD	175	0.0554
B2-010-103-FSCM-E12-BD	0	0.0000
B2-010-103-FSCM-E13-BD	83	0.0263
B2-010-103-FSCM-E14-BD	231	0.0729
B2-010-103-FSWO-F01-BD	0	0.0000
B2-010-103-FSWO-F02-BD	0	0.0000
B2-010-103-FSWO-F03-BD	0	0.0000
B2-010-103-FSWO-F04-BD	0	0.0000
B2-010-103-FSWO-F05-BD	0	0.0000
B2-010-103-FSWO-F06-BD	0	0.0000
B2-010-103-FSWO-F07-BD	0	0.0000
B2-010-103-FSWO-F08-BD	0	0.0000
B2-010-103-FSWO-F09-BD	0	0.0000
B2-010-103-FSWO-F10-BD	0	0.0000
B2-010-103-FSWO-F11-BD	0	0.0000
B2-010-103-FSWO-F12-BD	0	0.0000
B2-010-103-FSWO-F13-BD	0	0.0000
B2-010-103-FSWO-F14-BD	0	0.0000
B2-010-103-FSRO-G01-BD	281	0.0890
B2-010-103-FSRO-G02-BD	0	0.0000
B2-010-103-FSRO-G03-BD	203	0.0642
B2-010-103-FSRO-G04-BD	194	0.0613
B2-010-103-FSRO-G05-BD	0	0.0000



Measurement ID	Gross Activity (dpm/100 cm <sup>2</sup> )	Fraction of Adjusted Gross OpDCGL
B2-010-103-FSRO-G06-BD	378	0.1196
B2-010-103-FSRO-G07-BD	581	0.1838
B2-010-103-FSRO-G08-BD	369	0.1167
B2-010-103-FSRO-G09-BD	659	0.2086
B2-010-103-FSRO-G10-BD	498	0.1576
B2-010-103-FSWO-G11-BD	0	0.0000
B2-010-103-FSRO-G12-BD	258	0.0817
B2-010-103-FSWO-G13-BD	0	0.0000
B2-010-103-FSRO-G14-BD	632	0.1999
B2-010-103-FSRO-H01-BD	378	0.1196
B2-010-103-FSRO-H02-BD	1,143	0.3618
B2-010-103-FSRO-H03-BD	1,199	0.3793
B2-010-103-FSRO-H04-BD	1,199	0.3793
B2-010-103-FSRO-H05-BD	1,083	0.3428
B2-010-103-FSWO-H06-BD	106	0.0336
B2-010-103-FSWO-H07-BD	69	0.0219
B2-010-103-FSWO-H08-BD	0	0.0000
B2-010-103-FSWO-H09-BD	277	0.0875
B2-010-103-FSWO-H10-BD	226	0.0715
B2-010-103-FSWO-H11-BD	203	0.0642
B2-010-103-FSWO-H12-BD	364	0.1153
B2-010-103-FSWO-H13-BD	0	0.0000
B2-010-103-FSWO-H14-BD	295	0.0934
B2-010-103-FQFO-A09-BD	0	0.0000
B2-010-103-FQCM-B13-BD	0	0.0000
B2-010-103-FQWB-C13-BD	373	0.1182
B2-010-103-FQFO-D02-BD	0	0.0000
B2-010-103-FQFO-A21-BD	0	0.0000
B2-010-103-FQFC-D20-BD	5	0.0015
B2-010-103-FQSM-B16-BD	0	0.0000
B2-010-103-FQSM-E19-BD	81	0.0256
B2-010-103-FQSM-B21-BD	0	0.0000
B2-010-103-FQCM-E06-BD	295	0.0932

Measurement ID	Gross Activity (dpm/100 cm <sup>2</sup> )	Fraction of Adjusted Gross OpDCGL
B2-010-103-FQWO-F05-BD	0	0.0000
B2-010-103-FQRO-G06-BD	0	0.0000
B2-010-103-FQWO-H08-BD	33	0.0105
B2-010-103-FJFO-A15-BD	114	0.0361
B2-010-103-FJFO-A16-BD	0	0.0000
B2-010-103-FJFO-A17-BD	0	0.0000
B2-010-103-FJFO-A18-BD	103	0.0325
B2-010-103-FJFO-A19-BD	115	0.0364
B2-010-103-FJCM-B15-BD	0	0.0000
B2-010-103-FJWB-C15-BD	0	0.0000
B2-010-103-FJFO-D15-BD	0	0.0000
B2-010-103-FJFO-D18-BD	242	0.0766
B2-010-103-FJFO-D19-BD	224	0.0708
B2-010-103-FJFO-A21-BD	0	0.0000
B2-010-103-FJFO-A22-BD	0	0.0000
B2-010-103-FJFO-A23-BD	0	0.0000
B2-010-103-FJFO-D20-BD	0	0.0000
B2-010-103-FJFO-D21-BD	57	0.0180
B2-010-103-FJCM-E15-BD	46	0.0146
B2-010-103-FJWO-F15-BD	0	0.0000
B2-010-103-FJSO-C16-BD	42	0.0134
B2-010-103-FJWO-G15-BD	0	0.0000
B2-010-103-FJWO-H15-BD	32	0.0102
B2-010-103-FJSC-A16-BD	0	0.0000
B2-010-103-FJSC-D16-BD	0	0.0000
B2-010-103-FJSM-B16-BD	0	0.0000
B2-010-103-FJSM-B17-BD	0	0.0000
B2-010-103-FJSM-B18-BD	0	0.0000
B2-010-103-FJSM-B19-BD	0	0.0000
B2-010-103-FJSM-B20-BD	0	0.0000
B2-010-103-FJSM-B21-BD	0	0.0000
B2-010-103-FJSM-B22-BD	0	0.0000
B2-010-103-FJSM-E16-BD	0	0.0000

Measurement ID	Gross Activity (dpm/100 cm <sup>2</sup> )	Fraction of Adjusted Gross OpDCGL
B2-010-103-FJSM-E17-BD	0	0.0000
B2-010-103-FJSM-E18-BD	0	0.0000
B2-010-103-FJSM-E19-BD	0	0.0000
B2-010-103-FJSM-E20-BD	0	0.0000
B2-010-103-FJSM-E21-BD	0	0.0000

**Table 7-4 - Basic Statistical Properties of Systematic Measurement Population**

Mean (dpm/100cm <sup>2</sup> )	Median (dpm/100cm <sup>2</sup> )	Max (dpm/100cm <sup>2</sup> )	Min (dpm/100cm <sup>2</sup> )	Std. Dev. (dpm/100cm <sup>2</sup> )	Adjusted Gross BcDCGL (dpm/100cm <sup>2</sup> )	Mean Adjusted Gross BcDCGL Fraction	Dose (mrem/ yr)
113	0	1,199	0	249	19,751	0.0057	0.1426

The mean activity from systematic static measurements was divided by the Adjusted Gross Base Case DCGL to derive a mean fraction. The mean fraction was then multiplied by twenty-five (25) mrem/yr to derive the dose attributed to the survey unit. For survey unit B2-010-103, the calculated dose from residual activity is 0.1426 mrem/yr.

## 8. QUALITY CONTROL

The implementation of survey specific QC measures included the collection of thirteen (13) replicate static measurements (B2-010-103-FQFO-A09-BD, B2-010-103-FQCM-B13-BD, B2-010-103-FQWB-C13-BD, B2-010-103-FQFO-D02-BD, B2-010-103-FQCM-E06-BD, B2-010-103-FQWO-F05-BD, B2-010-103-FQRO-G06-BD, B2-010-103-FQWO-H08-BD, B2-010-103-FQFO-A21-BD, B2-010-103-FQFC-D20-BD, B2-010-103-FQSM-B16-BD, B2-010-103-FQSM-E19-BD, and B2-010-103-FQSM-B21-BD) for QC analysis. The acceptance criterion for replicate static measurements is that the same conclusion is reached for each measurement. The acceptance criterion is satisfied if the replicate measurement is within 20% of the standard measurement. In cases where the replicate measurement is not within 20% of the standard measurement, but both measurements are below the Operational DCGL as well as the static MDC, there is an acceptable agreement. Seven (7) of the QC replicate measurements did not fall within the 20% criteria; however, the standard and replicate measurements for each were well below the Adjusted Gross Operational DCGL as well as the static MDC, and no further action was deemed necessary.

## **9. INVESTIGATIONS AND RESULTS**

No investigations were performed during the performance or analyses of the survey.

## **10. REMEDIATION AND RESULTS**

No radiological remedial action as described by MARSSIM Section 5.4 was performed in this survey unit prior to or as a result of the FSS. Chapter 4 of the LTP determined that remediation beyond that required to meet the release criteria is unnecessary and that the remaining residual radioactivity in above grade buildings was ALARA.

## **11. CHANGES FROM THE FINAL STATUS SURVEY PLAN**

There were no addendums to the FSS plan.

## **12. DATA QUALITY ASSESSMENT (DQA)**

The DQO sample design and data were reviewed in accordance with LC-FS-PR-008, *Final Status Survey Data Assessment* (Reference 12) for completeness and consistency. Documentation was complete and legible. Scan surveys and the collection of static measurements were consistent with the DQOs and were sufficient to ensure that the survey unit was properly designated as Class 2. The survey design had adequate power as indicated by the Retrospective Power Curve (see Attachment 5).

The measurement results indicated that all measurements were less than 50% of the Adjusted Gross Operational DCGL.

Although MARSSIM states that the Sign test need not be performed in the instance that no measurements exceed the DCGL, the test was conducted to demonstrate coherence to the statistical principles of the DQO process. The Sign test was performed on the data and compared to the original assumptions of the DQOs. The evaluation of the Sign test results clearly demonstrates that the survey unit passes the unrestricted release criteria, thus, the null hypothesis is rejected. The results of the Sign test are presented in Attachment 3.

The preliminary data review consisted of calculating basic statistical quantities (e.g., mean, median, standard deviation). The mean and median values of the data were well below the Adjusted Gross Operational DCGL. Also, the retrospective power curve shows that a sufficient number of measurements were collected to achieve the desired power. Therefore, the survey unit meets the unrestricted release criteria with adequate power as required by the DQOs.

The survey unit data is presented graphically through a frequency plot and quantile plot. All graphical presentations are provided in Attachment 5.

### **13. ANOMALIES**

No anomalies were observed during the performance or analyses of the survey.

### **14. CONCLUSION**

Survey unit B2-010-103 has met the DQOs of the FSS plan. The ALARA criteria as specified in Chapter 4 of the LTP were achieved.

The sample data passed the Sign test. The null hypothesis was rejected. The Retrospective Power Curve showed that adequate power was achieved. The survey unit is properly classified as Class 2. Therefore, in accordance with the LTP, Section 5.11, the survey unit meets the release criteria.

The dose contribution from survey unit B2-010-103 is 0.1426 mrem/yr TEDE, based on the mean activity of measurements used for non-parametric statistical sampling.

Survey unit B2-010-103 is acceptable for unrestricted release.

### **15. REFERENCES**

1. LC-FS-PR-009, Final Status Survey Data Reporting
2. *La Crosse Boiling Water Reactor License Termination Plan*
3. LC-FS-PR-015, *Final Status Surveys for Structures*
4. LC-FS-PR-002, *Final Status Survey Package Development*
5. NUREG-1575, Revision 1, *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*
6. *La Crosse Boiling Water Reactor Historical Site Assessment*
7. GG-EO-313196-RS-RP-001, *Characterization Survey Report for La Cross Boiler Water Reactor*
8. RS-TD-313196-001, *Radionuclides of Concern during LACBWR Decommissioning*
9. NUREG-1757, Volume 2, Revision 1, *Consolidated Decommissioning Guidance – Characterization, Survey, and Determination of Radiological Criteria, Final Report*
10. LC-FS-TSD-002, *Operational Derived Concentration Guideline Levels for Final Status Survey*
11. LC-QA-PN-001, *Final Status Survey Quality Assurance Project Plan*
12. LC-FS-PR-008, *Final Status Survey Data Assessment*

### **16. ATTACHMENTS**

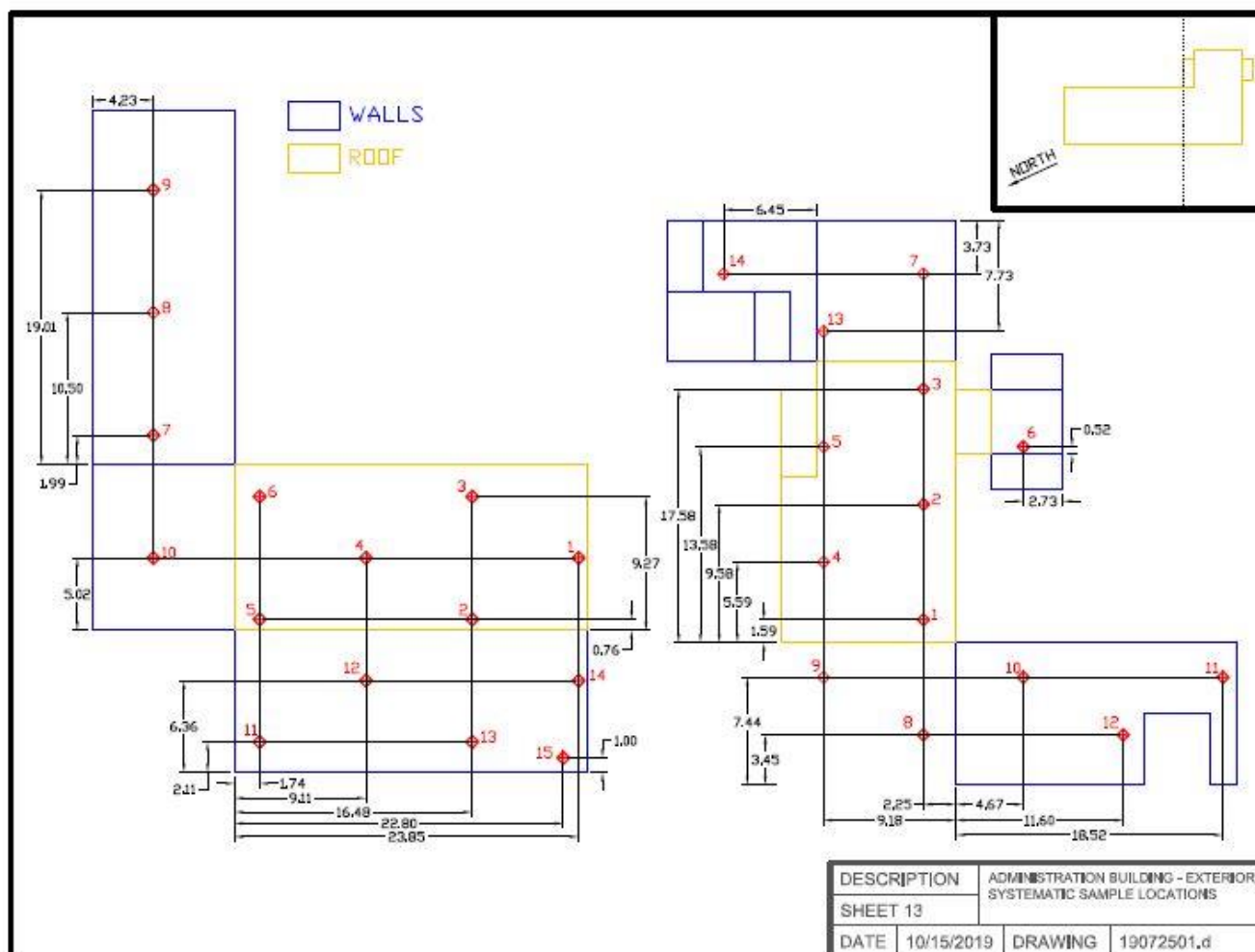
- 
- Attachment 1 – Figures and Maps
  - Attachment 2 – Scan Data
  - Attachment 3 – Sign Test
  - Attachment 4 – Quality Control Assessment
  - Attachment 5 – Graphical Presentations
  - Attachment 6 – Ludlum 2350-1 Download Reports



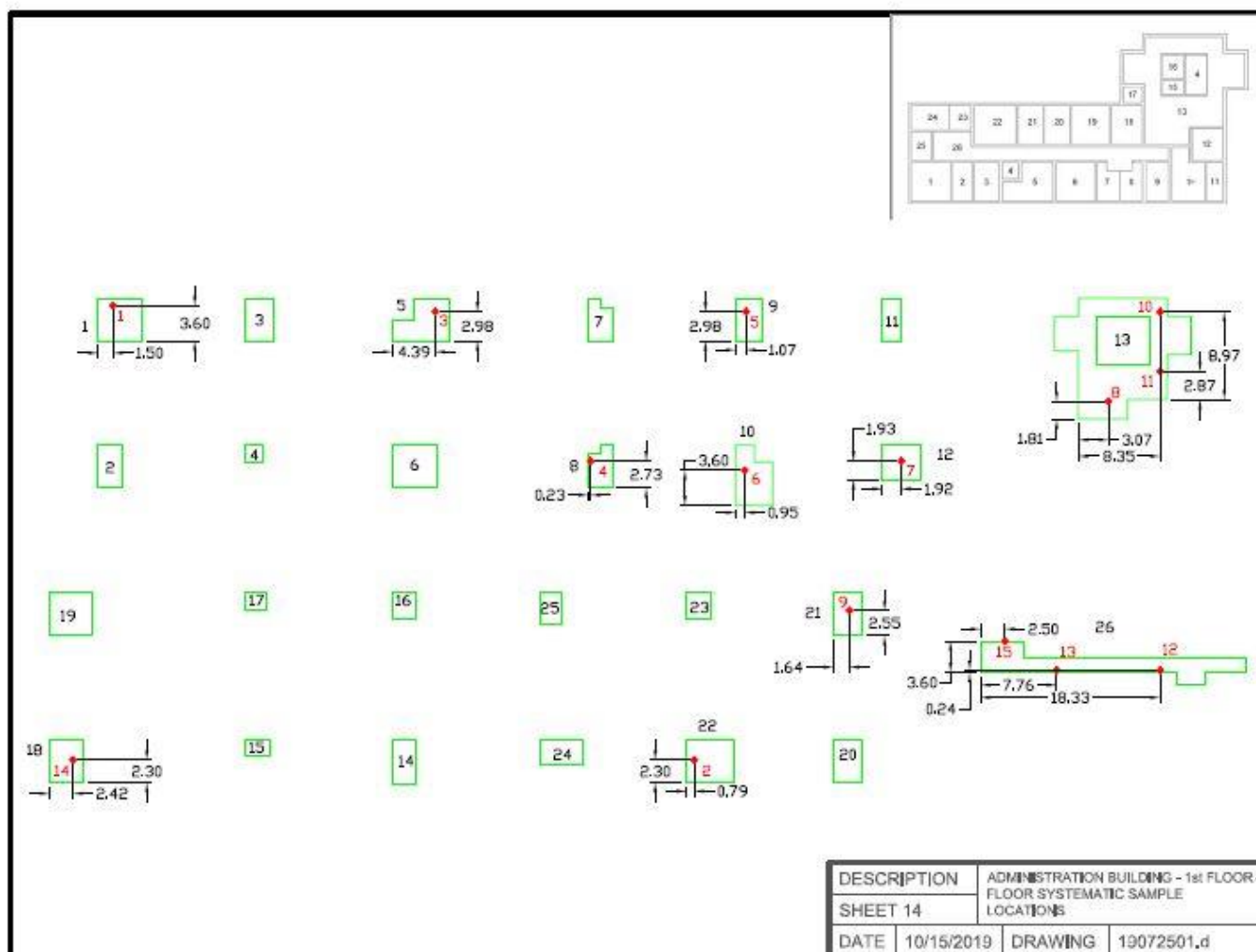
# **ATTACHMENT 1**

## **FIGURES AND MAPS**

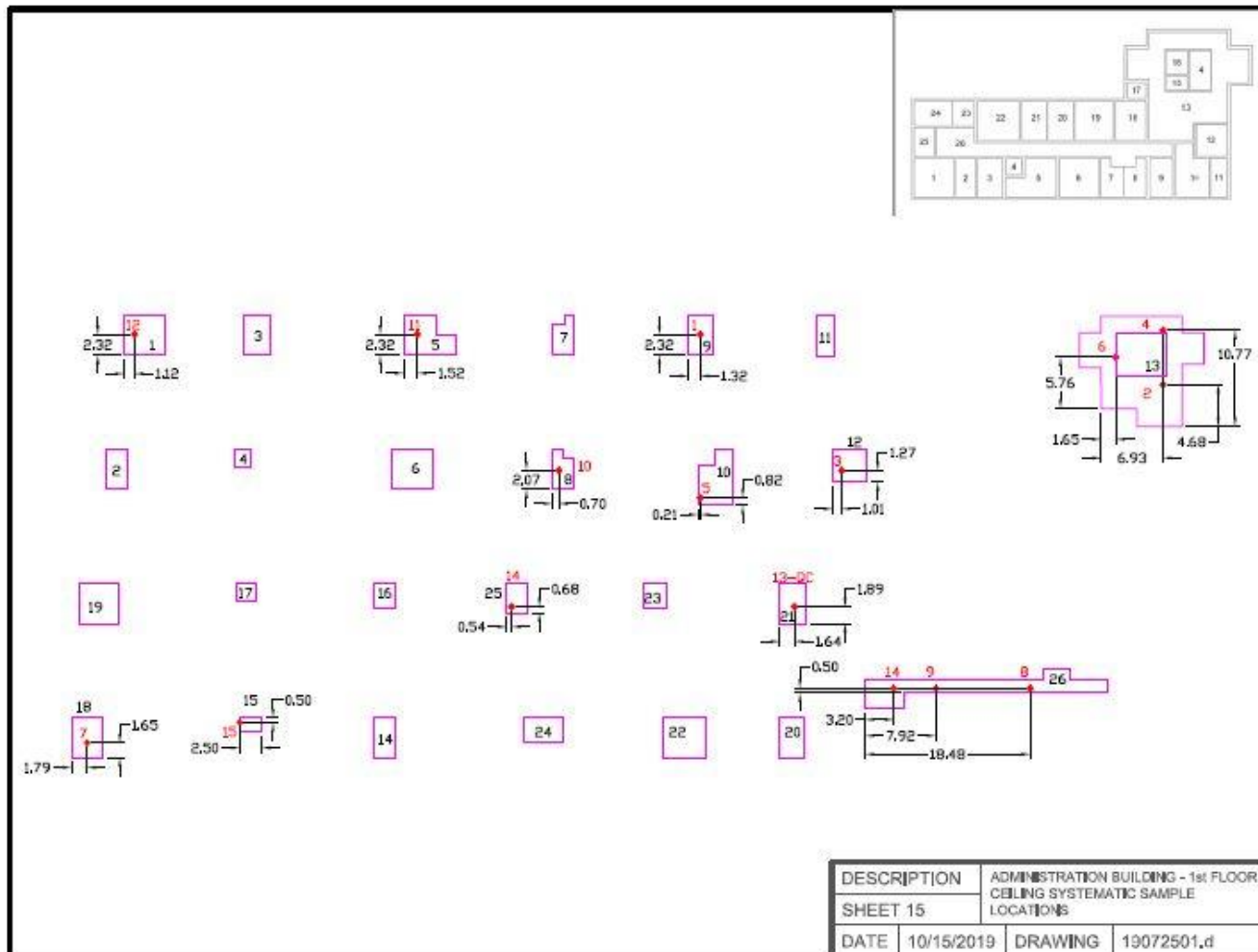
**Figure 16-1 – Survey Unit B2-010-103 Exterior Systematic and Judgmental Measurement Locations Map**



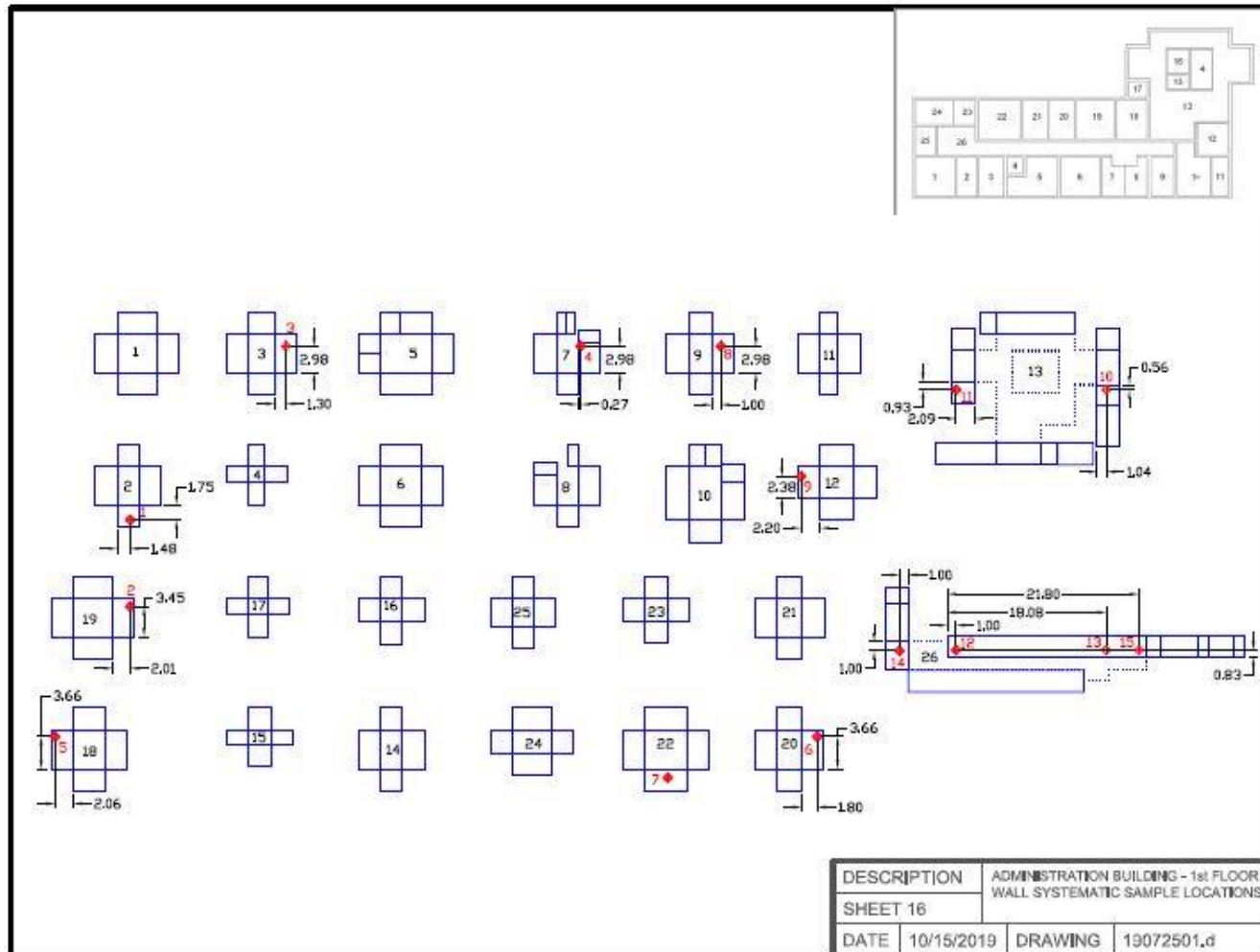
**Figure 16-2 – Survey Unit B2-010-103 Interior First Floor Systematic Measurement Locations Map**



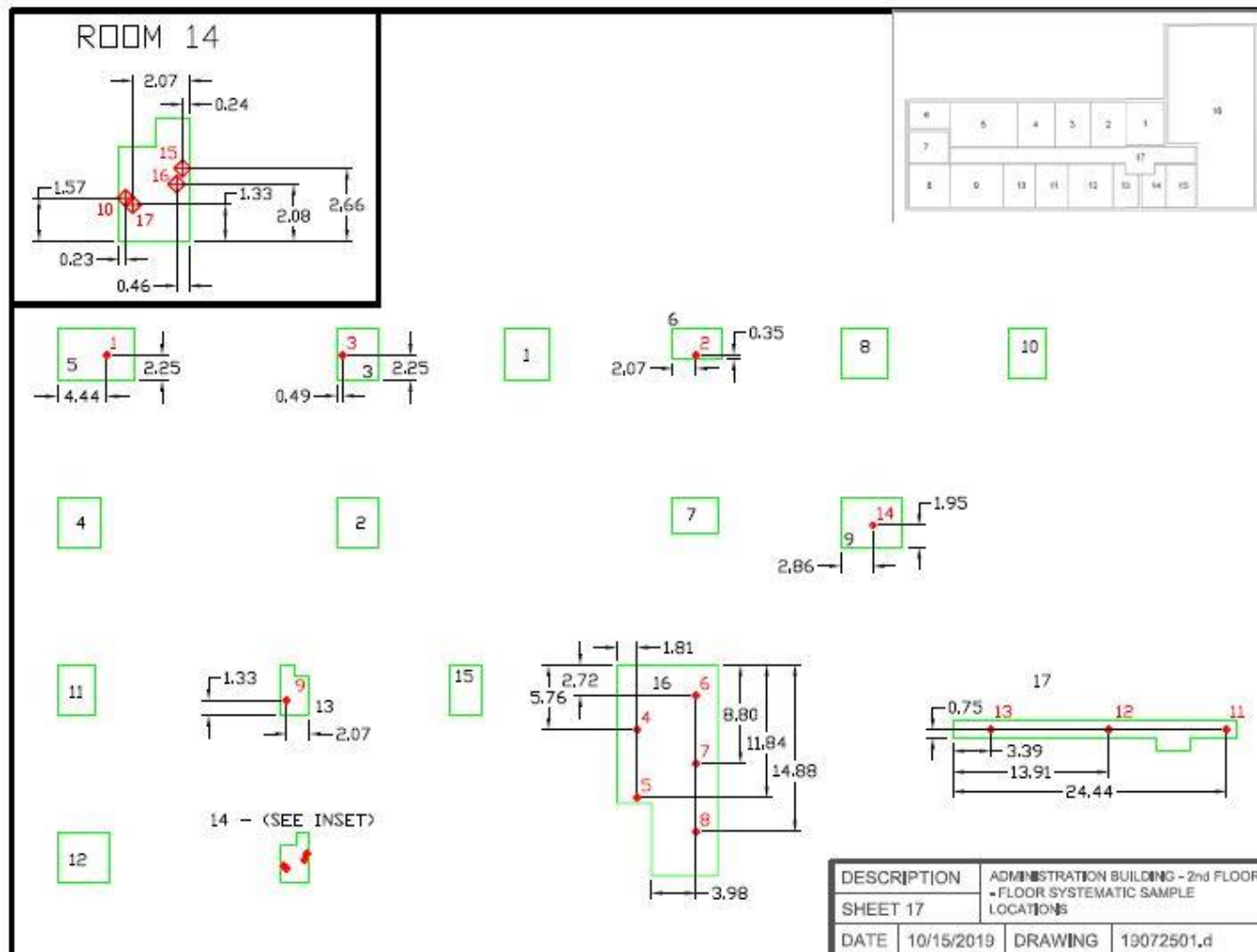
**Figure 16-3 – Survey Unit B2-010-103 Interior First Floor Ceiling Systematic Measurement Locations Map**



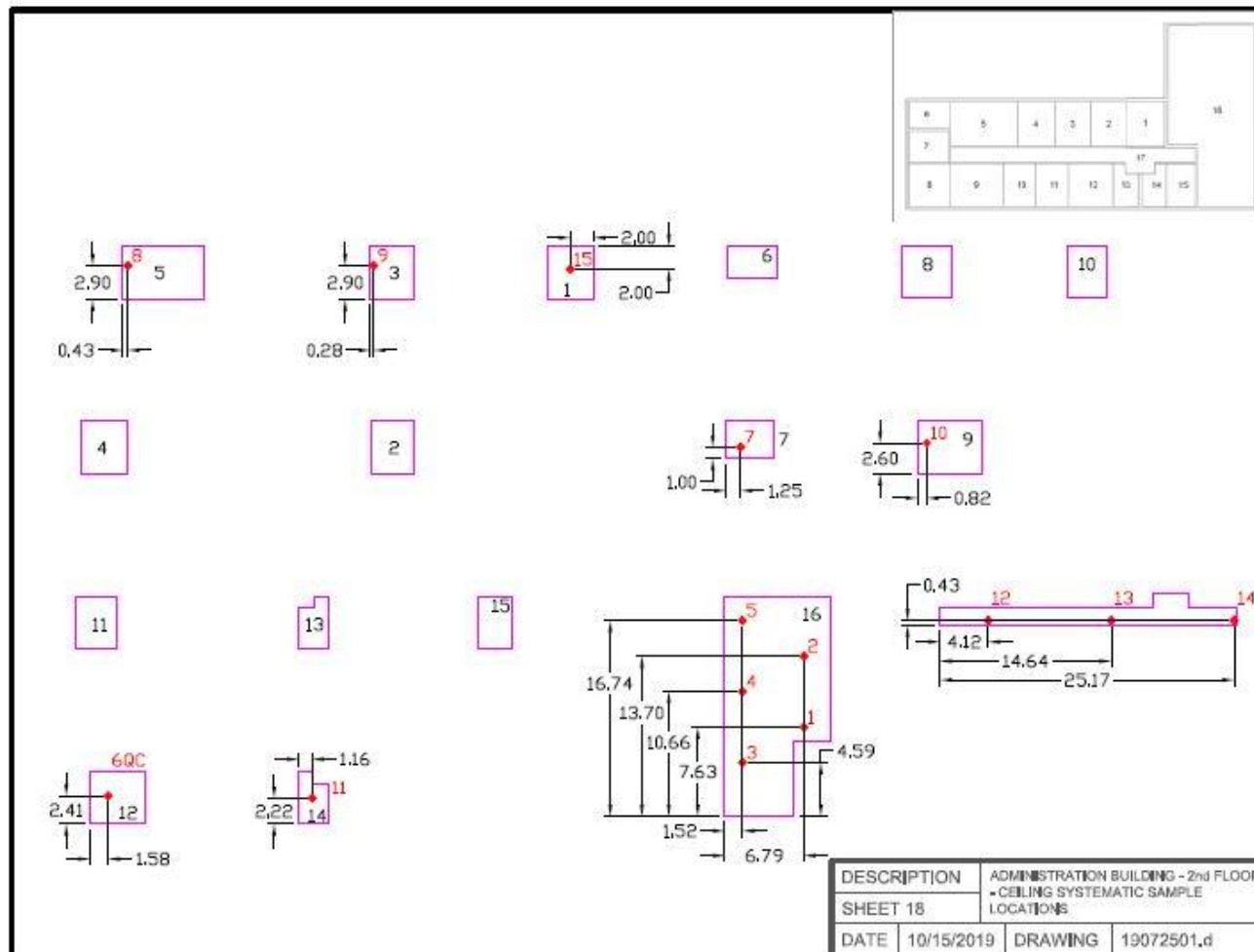
**Figure 16-4 – Survey Unit B2-010-103 Interior First Floor Wall Systematic Measurement Locations Map**



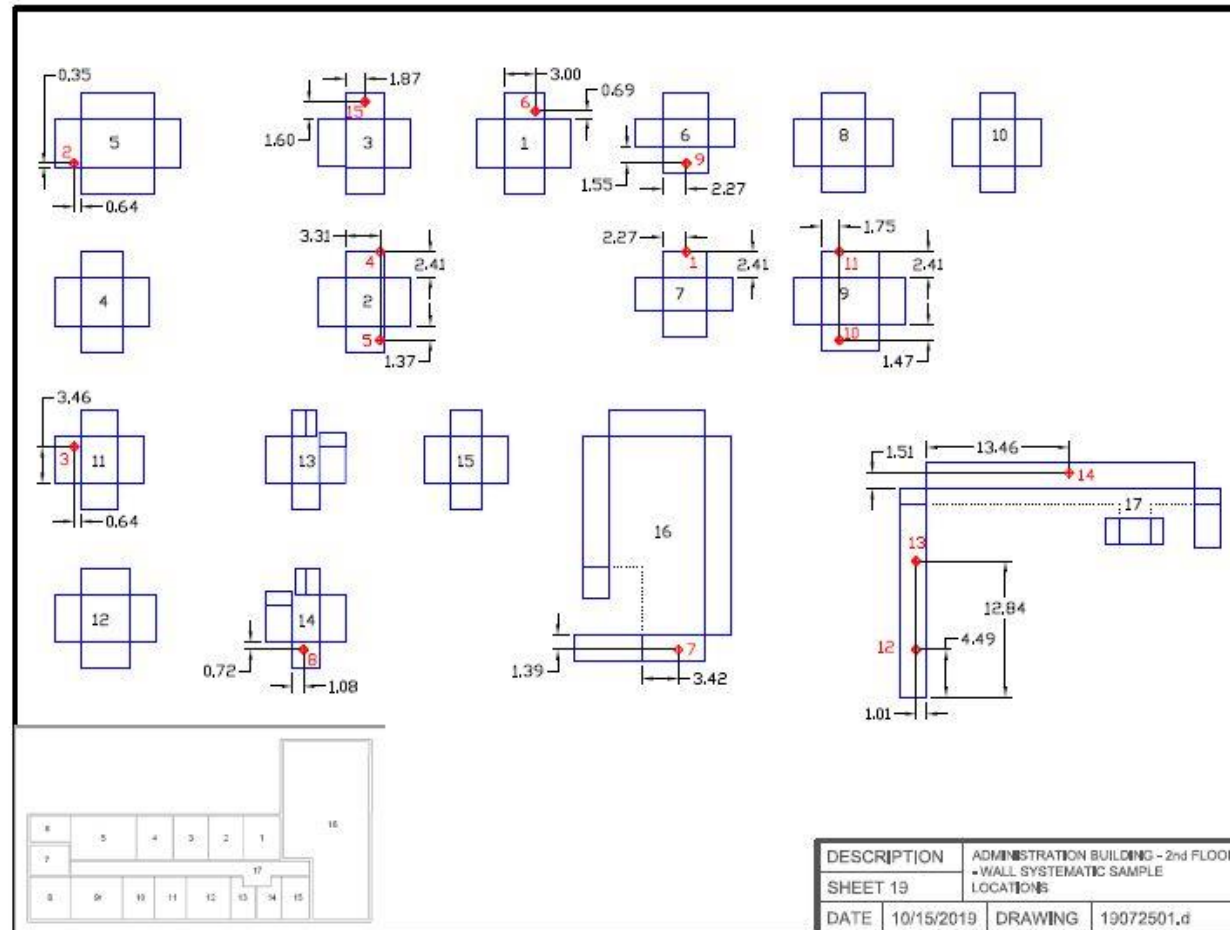
**Figure 16-5 – Survey Unit B2-010-103 Interior 2<sup>nd</sup> Floor Systematic and Judgmental Measurement Locations Map**



**Figure 16-6 – Survey Unit B2-010-103 Interior 2<sup>nd</sup> Floor Ceiling Systematic and Judgmental Measurement Locations Map**



**Figure 16-7 – Survey Unit B2-010-103 Interior 2<sup>nd</sup> Floor Wall Systematic and Judgmental Measurement Locations Map**





# **ATTACHMENT 2**

## **SCAN DATA**

**Table 16-1 – Survey Unit B2-010-103 Complete Scan Data**

<b>Scan Area</b>	<b>Highest Logged Reading (cpm)</b>	<b>Action Level (cpm)</b>
A01	576	592
A02	550	592
A03	589	592
A04	735	820
A05	568	592
A06	587	592
A07	503	592
A08	573	592
A09	436	592
A09 QC	343	578
A10	813	820
A11	817	820
A12	546	592
A13	562	592
A14	533	592
A15J	505	592
A17	757	775
A18	560	775
A19	435	475
A20	436	475
B01	424	673
B02	330	673
B03	395	673
B04	314	673
B05	384	673
B06	497	673
B07	380	673
B08	545	668
B09	593	668
B10	620	668
B11	622	668
B12	556	668

Scan Area	Highest Logged Reading (cpm)	Action Level (cpm)
D03	395	497
D04	454	476
D05	469	476
D06	428	497
D07	475	497
D08	517	581
D09	525	581
D10	514	581
D11	478	497
D12	473	497
D13	491	497
D14	476	497
D15	480	497
D18	718	775
D19	639	775
DR01	476	635
DR01 QC	350	612
DR02	337	635
DR03	296	635
DR04	304	635
DR05	430	635
DR20 QC	326	542
E01	253	542
E02	327	542
E03	255	542
E04	262	542
E05	245	542
E06	238	537
E06 QC	426	507

Scan Area	Highest Logged Reading (cpm)	Action Level (cpm)
E07	255	537
E08	286	537
E09	286	537
E10	265	537
E11	275	537
E12	220	537
E13	224	537
E14	267	537
E15	297	537
F01	606	607
F02	526	607
F03	581	607
F04	575	607
F05	603	607
F05 QC	543	656
F06	586	607
F07	596	607
F08	586	607
F09	606	607
F10	568	571
F11	504	571
F12	476	628
F13	530	571
F14	546	571
F15	548	571
FH01	450	520
G01	411	564
G02	353	564
G03	434	564
G04	372	547

Scan Area	Highest Logged Reading (cpm)	Action Level (cpm)
G05	388	547
G06	404	547
G06 QC	546	629
G07	373	547
G08	376	547
G09	406	547
G10	349	547
G11	424	547
G12	423	547
G13	336	629
G14	353	629
G15	347	629
H01	542	564
H02	535	564
H03	505	564
H04	529	564
H05	480	564
H06	381	627
H07	394	627
H08	298	627
H08 QC	550	629
H09	358	627
H10	392	627
H11	367	627
H12	370	627
H13	414	627
H14	365	627
H15	425	627

Scan Area	Highest Logged Reading (cpm)	Action Level (cpm)
SK07	458	520
SK08	450	520
VT01	448	520
VT01 QC	303	612
VT02	472	520
VT03	438	520
VT03 QC	304	572
VT04	459	520
VT05	462	520
VT06	458	520
VT07	470	520
VT08	484	520
VT09	491	520
VT10	473	520
VT11	513	520
VT12	379	520
VT13	405	520
VT22 QC	356	612

(2) Action Level for scanning was conservatively based on the average background plus 50% of the Operational DCGL converted to cpm using the detector efficiency.

# **ATTACHMENT 3**

## **SIGN TEST**

**Table 16-2 – Survey Unit B2-010-103 Sign Test**

#	SOF (Ws)	1-Ws	Sign
1	0.0000	1.0000	+1
2	0.0632	0.9368	+1
3	0.0000	1.0000	+1
4	0.0000	1.0000	+1
5	0.1429	0.8571	+1
6	0.0015	0.9985	+1
7	0.0000	1.0000	+1
8	0.0000	1.0000	+1
9	0.0120	0.9880	+1
10	0.0000	1.0000	+1
11	0.0000	1.0000	+1
12	0.0602	0.9398	+1
13	0.0632	0.9368	+1
14	0.0000	1.0000	+1
15	0.0000	1.0000	+1
16	0.0000	1.0000	+1
17	0.0000	1.0000	+1
18	0.0000	1.0000	+1
19	0.0466	0.9534	+1
20	0.0000	1.0000	+1
21	0.0000	1.0000	+1
22	0.0000	1.0000	+1
23	0.0000	1.0000	+1
24	0.0000	1.0000	+1
25	0.0000	1.0000	+1
26	0.0000	1.0000	+1
27	0.0000	1.0000	+1
28	0.0000	1.0000	+1
29	0.0000	1.0000	+1
30	0.0000	1.0000	+1
31	0.0000	1.0000	+1
32	0.0000	1.0000	+1
33	0.0000	1.0000	+1
34	0.0000	1.0000	+1



#	SOF (Ws)	1-Ws	Sign
35	0.0000	1.0000	+1
36	0.0000	1.0000	+1
37	0.0000	1.0000	+1
38	0.0000	1.0000	+1
39	0.0000	1.0000	+1
40	0.0241	0.9759	+1
41	0.0000	1.0000	+1
42	0.0000	1.0000	+1
43	0.0000	1.0000	+1
44	0.0000	1.0000	+1
45	0.0000	1.0000	+1
46	0.0000	1.0000	+1
47	0.0000	1.0000	+1
48	0.0000	1.0000	+1
49	0.0000	1.0000	+1
50	0.0000	1.0000	+1
51	0.0000	1.0000	+1
52	0.0000	1.0000	+1
53	0.0000	1.0000	+1
54	0.0000	1.0000	+1
55	0.0336	0.9664	+1
56	0.0015	0.9985	+1
57	0.0131	0.9869	+1
58	0.0000	1.0000	+1
59	0.0160	0.9840	+1
60	0.0000	1.0000	+1
61	0.0000	1.0000	+1
62	0.0000	1.0000	+1
63	0.0000	1.0000	+1
64	0.0088	0.9912	+1
65	0.0554	0.9446	+1
66	0.0000	1.0000	+1
67	0.0263	0.9737	+1
68	0.0729	0.9271	+1
69	0.0000	1.0000	+1
70	0.0000	1.0000	+1

#	SOF (Ws)	1-Ws	Sign
71	0.0000	1.0000	+1
72	0.0000	1.0000	+1
73	0.0000	1.0000	+1
74	0.0000	1.0000	+1
75	0.0000	1.0000	+1
76	0.0000	1.0000	+1
77	0.0000	1.0000	+1
78	0.0000	1.0000	+1
79	0.0000	1.0000	+1
80	0.0000	1.0000	+1
81	0.0890	0.9110	+1
82	0.0000	1.0000	+1
83	0.0642	0.9358	+1
84	0.0613	0.9387	+1
85	0.0000	1.0000	+1
86	0.1196	0.8804	+1
87	0.1838	0.8162	+1
88	0.1167	0.8833	+1
89	0.2086	0.7914	+1
90	0.1576	0.8424	+1
91	0.0000	1.0000	+1
92	0.0817	0.9183	+1
93	0.0000	1.0000	+1
94	0.1999	0.8001	+1
95	0.1196	0.8804	+1
96	0.3618	0.6382	+1
97	0.3793	0.6207	+1
98	0.3793	0.6207	+1
99	0.3428	0.6572	+1
100	0.0336	0.9664	+1
101	0.0219	0.9781	+1
102	0.0000	1.0000	+1
103	0.0875	0.9125	+1
104	0.0715	0.9285	+1
105	0.0642	0.9358	+1
106	0.1153	0.8847	+1

#	SOF (W <sub>s</sub> )	1-W <sub>s</sub>	Sign
107	0.0000	1.0000	+1
108	0.0934	0.9066	+1
109	0.0000	1.0000	+1
110	0.0632	0.9368	+1
111	0.0000	1.0000	+1
112	0.0000	1.0000	+1

Number of positive differences (S+) 112

Critical Value 65

Survey Unit \_\_\_\_\_ Meets  
 The release criteria

# **ATTACHMENT 4**

## **QUALITY CONTROL ASSESSMENT**

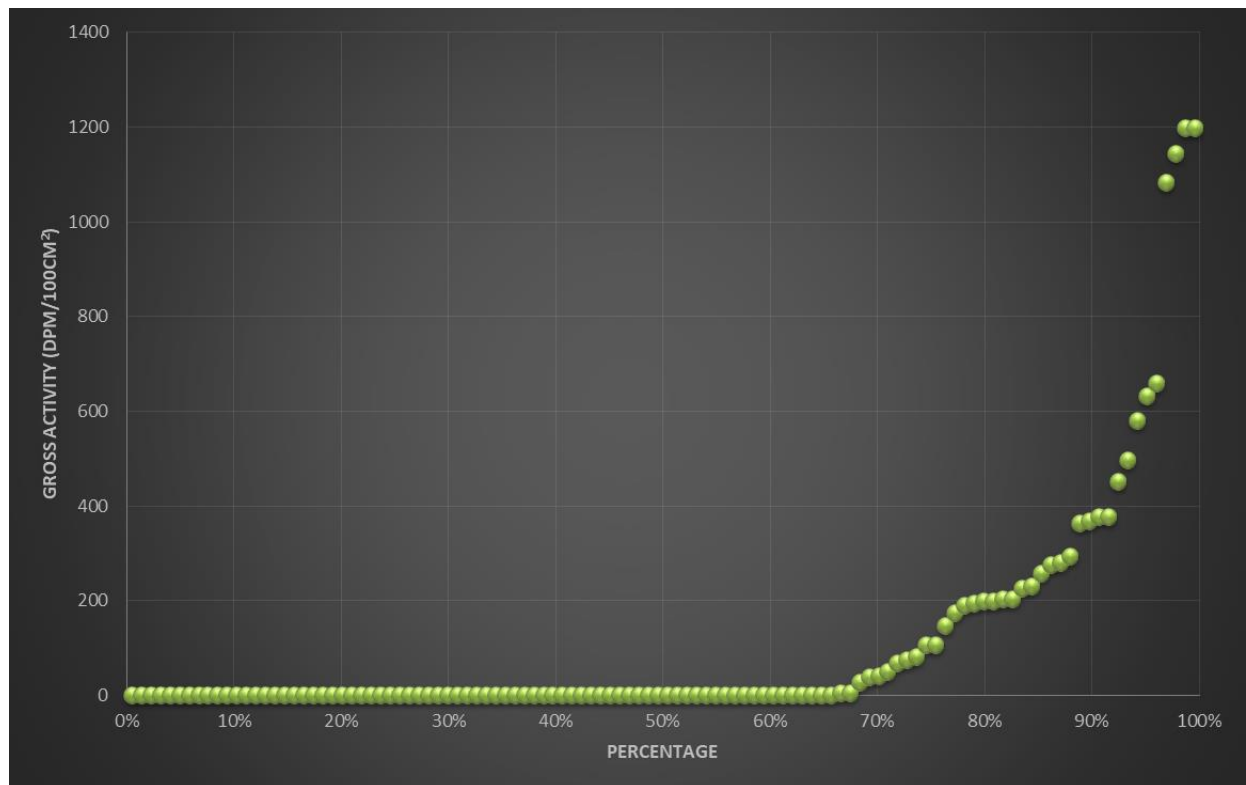
**Table 16-3 – Survey Unit B2-010-103 QC Assessment**

Standard	Activity (dpm/100cm <sup>2</sup> )	-20%	+20%	Comparison	Activity (dpm/100cm <sup>2</sup> )	Within 20%
B2-010-103-FSFO-A09-BD	38	30	46	B2-010-103-FQFO-A09-BD	0	N
B2-010-103-FSCM-B13-BD	0	0	0	B2-010-103-FQCM-B13-BD	0	Y
B2-010-103-FSWB-C13-BD	0	0	0	B2-010-103-FQWB-C13-BD	373	N
B2-010-103-FSFO-D02-BD	0	0	0	B2-010-103-FQFO-D02-BD	0	Y
B2-010-103-FSCM-E06-BD	0	0	0	B2-010-103-FQCM-E06-BD	295	N
B2-010-103-FSWO-F05-BD	0	0	0	B2-010-103-FQWO-F05-BD	0	Y
B2-010-103-FSRO-G06-BD	378	302	454	B2-010-103-FQRO-G06-BD	0	N
B2-010-103-FSWO-H08-BD	0	0	0	B2-010-103-FQWO-H08-BD	33	N
B2-010-103-FJWB-C15-BD	0	0	0	B2-010-103-FQFO-A21-BD	0	Y
B2-010-103-FJFO-D19-BD	224	179	269	B2-010-103-FQFC-D20-BD	5	N
B2-010-103-FJSM-B16-BD	0	0	0	B2-010-103-FQSM-B16-BD	0	Y
B2-010-103-FJSM-E19-BD	0	0	0	B2-010-103-FQSM-E19-BD	81	N
B2-010-103-FJSM-B21-BD	0	0	0	B2-010-103-FQSM-B21-BD	0	Y
Comments/Corrective Actions: The replicate measurement results are in acceptable agreement.				The acceptance criteria for replicate static measurements is that the same conclusion is reached for each measurement. This is defined as the replicate measurement being within 20% of the standard measurement. In cases where the replicate measurement is not within 20% of the standard measurement, but both measurements are well below the Operational DCGL, there is an acceptable agreement.		

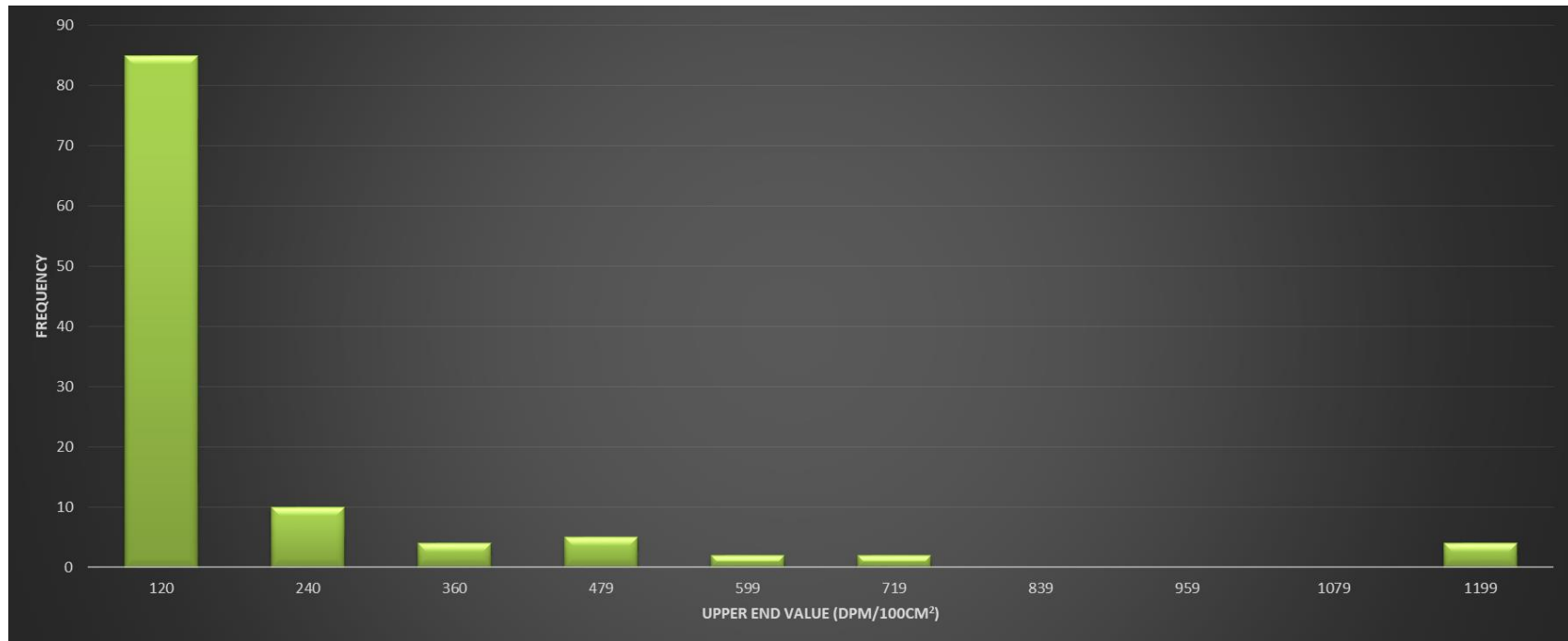
# **ATTACHMENT 5**

## **GRAPHICAL PRESENTATIONS**

**Figure 16-8 – Quantile Plot for Gross Activity**

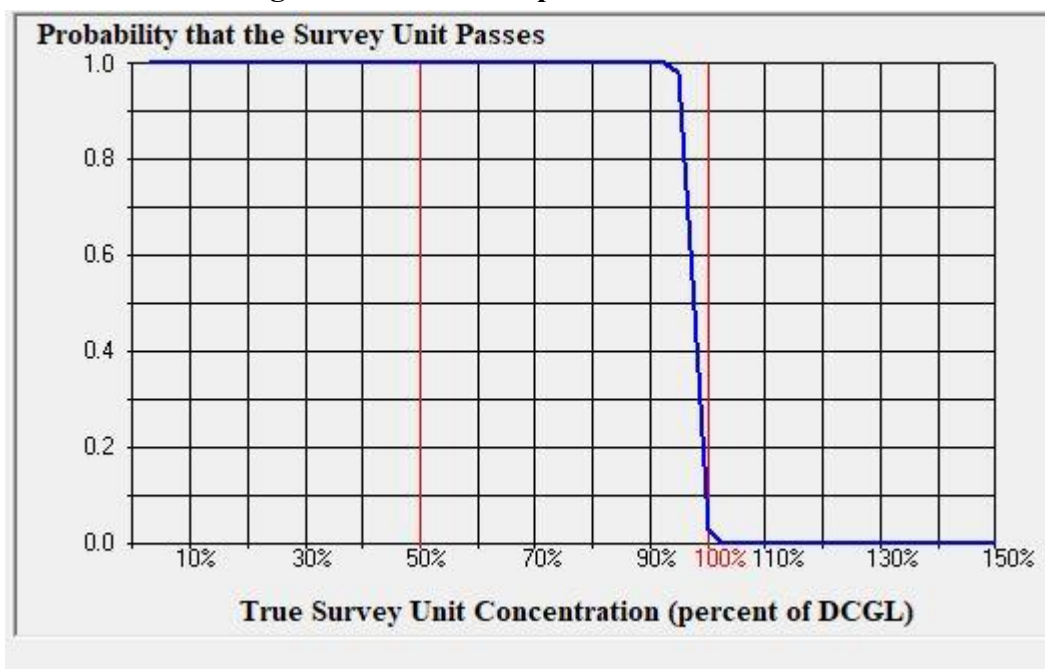


**Figure 16-9 – Histogram for Gross Activity**





**Figure 16-10 – Retrospective Power Curve**



**ATTACHMENT 6**  
**LUDLUM 2350-1 DOWNLOAD**  
**REPORTS**

## B2-010-103 A FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRRKG		10/4/2019 7:10	2	181	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/4/2019 7:13	2	2555	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/4/2019 8:23	2	255	c	60	1	0	325246	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/4/2019 8:24	2	266	c	60	1	0	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/4/2019 8:25	2	254	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/4/2019 8:27	2	255	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/4/2019 8:29	2	268	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	9A	BS			10/4/2019 8:52	2	436	c	0	0	0	325246	SB1521
44-116	357009	8	B2103	9A	BD			10/4/2019 8:54	2	268	c	60	1	0	325246	SB1521
44-116	357009	9	B2103	2A	BS			10/4/2019 9:12	2	550	c	0	0	0	325246	SB1521
44-116	357009	10	B2103	2A	BD			10/4/2019 9:15	2	302	c	60	1	0	325246	SB1521
44-116	357009	11	B2103	13A	BS			10/4/2019 9:32	2	562	c	0	0	0	325246	SB1521
44-116	357009	12	B2103	13A	BD			10/4/2019 9:35	2	302	c	60	1	0	325246	SB1521
44-116	357009	13	B2103	12A	BS			10/4/2019 9:50	2	546	c	0	0	0	325246	SB1521
44-116	357009	14	B2103	12A	BD			10/4/2019 9:52	2	300	c	60	1	0	325246	SB1521
44-116	357009	15	B2103	15A	BS			10/4/2019 10:08	2	505	c	0	0	0	325246	SB1521
44-116	357009	16	B2103	15A	BD			10/4/2019 10:10	2	284	c	60	1	0	325246	SB1521
44-116	357009	17	B2103	1A	BS			10/4/2019 10:54	2	576	c	0	0	0	325246	SB1521
44-116	357009	18	B2103	1A	BD			10/4/2019 10:56	2	251	c	60	1	0	325246	SB1521
44-116	357009	19	B2103	3A	BS			10/4/2019 12:28	2	589	c	0	0	0	325246	SB1521
44-116	357009	20	B2103	3A	BD			10/4/2019 12:30	2	252	c	60	1	0	325246	SB1521
44-116	357009	21	B2103	7A	BS			10/4/2019 12:47	2	503	c	0	0	0	325246	SB1521
44-116	357009	22	B2103	7A	BD			10/4/2019 12:50	2	242	c	60	1	0	325246	SB1521
44-116	357009	23	B2103	8A	BS			10/4/2019 13:06	2	573	c	0	0	0	325246	SB1521
44-116	357009	24	B2103	8A	BD			10/4/2019 13:08	2	206	c	60	1	0	325246	SB1521
44-116	357009	25	B2103	14A	BS			10/4/2019 13:27	2	533	c	0	0	0	325246	SB1521
44-116	357009	26	B2103	14A	BD			10/4/2019 13:28	2	244	c	60	1	0	325246	SB1521
44-116	357009	27	B2103	6A	BS			10/4/2019 14:05	2	587	c	0	0	0	325246	SB1521
44-116	357009	28	B2103	6A	BD			10/4/2019 14:07	2	261	c	60	1	0	325246	SB1521
44-116	357009	29	B2103	5A	BS			10/4/2019 14:20	2	568	c	0	0	0	325246	SB1521
44-116	357009	30	B2103	5A	BD			10/4/2019 14:22	2	355	c	60	1	0	325246	SB1521
44-116	357009	31	B2103	FLDBK	BD			10/4/2019 14:28	2	503	c	60	1	0	325246	SB1521
44-116	357009	32	B2103	FLDBK	BD			10/4/2019 14:29	2	485	c	60	1	0	325246	SB1521
44-116	357009	33	B2103	FLDBK	BD			10/4/2019 14:30	2	477	c	60	1	0	325246	SB1521
44-116	357009	34	B2103	FLDBK	BD			10/4/2019 14:31	2	522	c	60	1	0	325246	SB1521
44-116	357009	35	B2103	FLDBK	BD			10/4/2019 14:33	2	455	c	60	1	0	325246	SB1521
44-116	357009	36	B2103	11A	BS			10/4/2019 14:50	2	817	c	0	0	0	325246	SB1521
44-116	357009	37	B2103	11A	BD			10/4/2019 14:51	2	431	c	60	1	0	325246	SB1521
44-116	357009	38	B2103	10A	BS			10/4/2019 15:08	2	813	c	0	0	0	325246	SB1521
44-116	357009	39	B2103	10A	BD			10/4/2019 15:10	2	472	c	60	1	0	325246	SB1521
44-116	357009	40	B2103	4A	BS			10/4/2019 15:26	2	735	c	0	0	0	325246	SB1521
44-116	357009	41	B2103	4A	BD			10/4/2019 15:27	2	393	c	60	1	0	325246	SB1521
44-116	357009	42			BD	PSBKG		10/4/2019 15:31	2	180	c	60	1	0	325246	SB1521
44-116	357009	43			BD		PSCHK	10/4/2019 15:35	2	2511	c	60	1	1	325246	SB1521

WBg

None 10/11/19

Summary # 2019-1177  
PS 13 of 17

B2-010-103 D FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	222981	0			BD	PRBKG		10/4/2019 7:40	3	158	c	60	1	0	126195	MJD
44-116	222981	1			BD		PRCHK	10/4/2019 7:43	3	1840	c	60	1	1	126195	MJD
44-116	222981	2	B2103	FLDBK	BD			10/4/2019 8:41	3	240	c	60	1	0	126195	MJD
44-116	222981	3	B2103	FLDBK	BD			10/4/2019 8:42	3	234	c	60	1	0	126195	MJD
44-116	222981	4	B2103	FLDBK	BD			10/4/2019 8:43	3	250	c	60	1	0	126195	MJD
44-116	222981	5	B2103	FLDBK	BD			10/4/2019 8:44	3	240	c	60	1	0	126195	MJD
44-116	222981	6	B2103	FLDBK	BD			10/4/2019 8:46	3	220	c	60	1	0	126195	MJD
44-116	222981	7	B2103	D2	BS			10/4/2019 9:22	3	492	c	0	0	0	126195	MJD
44-116	222981	8	B2103	D2	BD			10/4/2019 9:25	3	209	c	60	1	0	126195	MJD
44-116	222981	9	B2103	D13	BS			10/4/2019 9:43	3	491	c	0	0	0	126195	MJD
44-116	222981	10	B2103	D13	BD			10/4/2019 9:46	3	168	c	60	1	0	126195	MJD
44-116	222981	11	B2103	D12	BS			10/4/2019 10:04	3	473	c	0	0	0	126195	MJD
44-116	222981	12	B2103	D12	BS			10/4/2019 10:06	3	198	c	60	1	0	126195	MJD
44-116	222981	13	B2103	D11	BS			10/4/2019 10:24	3	478	c	0	0	0	126195	MJD
44-116	222981	14	B2103	D11	BD			10/4/2019 10:26	3	207	c	60	1	0	126195	MJD
44-116	222981	15	B2103	D15	BS			10/4/2019 10:58	3	480	c	0	0	0	126195	MJD
44-116	222981	16	B2103	D15	BD			10/4/2019 11:00	3	190	c	60	1	0	126195	MJD
44-116	222981	17	B2103	D3	BS			10/4/2019 12:39	3	395	c	0	0	0	126195	MJD
44-116	222981	18	B2103	D3	BD			10/4/2019 12:41	3	191	c	60	1	0	126195	MJD
44-116	222981	19	B2103	D14	BS			10/4/2019 13:51	3	476	c	0	0	0	126195	MJD
44-116	222981	20	B2103	D14	BD			10/4/2019 13:54	3	182	c	60	1	0	126195	MJD
44-116	222981	21	B2103	D1	BS			10/4/2019 14:35	3	443	c	0	0	0	126195	MJD
44-116	222981	22	B2103	D1	BD			10/4/2019 14:37	3	169	c	60	1	0	126195	MJD
44-116	222981	23	B2103	D6	BS			10/4/2019 15:30	3	428	c	0	0	0	126195	MJD
44-116	222981	24	B2103	D6	BD			10/4/2019 15:32	3	156	c	60	1	0	126195	MJD
44-116	222981	25	B2103	D7	BS			10/4/2019 15:50	3	475	c	0	0	0	126195	MJD
44-116	222981	26	B2103	D7	BD			10/4/2019 15:52	3	158	c	60	1	0	126195	MJD
44-116	222981	29			BD	PSBKG		10/4/2019 16:08	3	178	c	60	1	0	126195	MJD
44-116	222981	31			BD		PSCHK	10/4/2019 16:15	3	1810	c	60	1	1	126195	MJD

WJZ

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 Alarm=0	No	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/4/2019 7:52		1	169 c	60	1		0	325261	WDC1111
44-116	357439	1			BD		PRCHK	10/4/2019 7:55		1	2505 c	60	1		1	325261	WDC1111
44-116	357439	2	B2103	FLDBK	BD			10/4/2019 8:44		1	258 c	60	1		0	325261	WDC1111
44-116	357439	3	B2103	FLDBK	BD			10/4/2019 8:45		1	222 c	60	1		0	325261	WDC1111
44-116	357439	4	B2103	FLDBK	BD			10/4/2019 8:46		1	187 c	60	1		0	325261	WDC1111
44-116	357439	5	B2103	FLDBK	BD			10/4/2019 8:47		1	230 c	60	1		0	325261	WDC1111
44-116	357439	6	B2103	FLDBK	BD			10/4/2019 8:48		1	217 c	60	1		0	325261	WDC1111
44-116	357439	7	B2103	FLDBK	BD			10/4/2019 9:49		1	213 c	60	1		0	325261	WDC1111
44-116	357439	8	B2103	H1	BS			10/4/2019 10:23		1	542 c	0	0		0	325261	WDC1111
44-116	357439	9	B2103	H1	BD			10/4/2019 10:25		1	304 c	60	1		0	325261	WDC1111
44-116	357439	10	B2103	H2	BS			10/4/2019 12:21		1	535 c	0	0		0	325261	WDC1111
44-116	357439	11	B2103	H2	BD			10/4/2019 12:22		1	470 c	60	1		0	325261	WDC1111
44-116	357439	12	B2103	H3	BS			10/4/2019 12:53		1	505 c	0	0		0	325261	WDC1111
44-116	357439	13	B2103	H3	BD			10/4/2019 12:56		1	482 c	60	1		0	325261	WDC1111
44-116	357439	14	B2103	H4	BS			10/4/2019 13:24		1	529 c	0	0		0	325261	WDC1111
44-116	357439	15	B2103	H4	BD			10/4/2019 13:27		1	482 c	60	1		0	325261	WDC1111
44-116	357439	16	B2103	H5	BS			10/4/2019 13:53		1	480 c	0	0		0	325261	WDC1111
44-116	357439	18	B2103	H5	BD			10/4/2019 13:55		1	457 c	60	1		0	325261	WDC1111
44-116	357439	19	B2103	G1	BS			10/4/2019 14:28		1	411 c	0	0		0	325261	WDC1111
44-116	357439	20	B2103	G1	BD			10/4/2019 14:29		1	283 c	60	1		0	325261	WDC1111
44-116	357439	21	B2103	G2	BS			10/4/2019 15:22		1	353 c	0	0		0	325261	WDC1111
44-116	357439	22	B2103	G2	BD			10/4/2019 15:24		1	184 c	60	1		0	325261	WDC1111
44-116	357439	23	B2103	G3	BS			10/4/2019 15:53		1	434 c	0	0		0	325261	WDC1111
44-116	357439	24	B2103	G3	BD			10/4/2019 15:54		1	266 c	60	1		0	325261	WDC1111
44-116	357439	25			BD	PSBKG		10/4/2019 16:02		1	158 c	60	1		0	325261	WDC1111
44-116	357439	26			BD		PSCHK	10/4/2019 16:05		1	2374 c	60	1		1	325261	WDC1111

## B2-010-103 C FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG		10/7/2019 7:46	2	199	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/7/2019 7:51	2	2540	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/7/2019 8:18	2	384	c	60	1	0	325246	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/7/2019 8:19	2	398	c	60	1	0	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/7/2019 8:21	2	375	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/7/2019 8:22	2	428	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/7/2019 8:23	2	416	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	14C	BS			10/7/2019 9:22	2	647	c	0	0	0	325246	SB1521
44-116	357009	8	B2103	14C	BD			10/7/2019 9:25	2	416	c	60	1	0	325246	SB1521
44-116	357009	9	B2103	13C	BS			10/7/2019 9:55	2	682	c	0	0	0	325246	SB1521
44-116	357009	10	B2103	13C	BD			10/7/2019 9:58	2	200	c	60	1	0	325246	SB1521
44-116	357009	11	B2103	12C	BS			10/7/2019 10:29	2	678	c	0	0	0	325246	SB1521
44-116	357009	12	B2103	12C	BD			10/7/2019 10:31	2	333	c	60	1	0	325246	SB1521
44-116	357009	13	B2103	15C	BS			10/7/2019 12:30	2	706	c	0	0	0	325246	SB1521
44-116	357009	14	B2103	15C	BD			10/7/2019 12:33	2	293	c	60	1	0	325246	SB1521
44-116	357009	15	B2103	11C	BS			10/7/2019 13:19	2	731	c	0	0	0	325246	SB1521
44-116	357009	16	B2103	11C	BD			10/7/2019 13:23	2	322	c	60	1	0	325246	SB1521
44-116	357009	17	B2103	10C	BS			10/7/2019 13:54	2	731	c	0	0	0	325246	SB1521
44-116	357009	18	B2103	10C	BD			10/7/2019 13:56	2	268	c	60	1	0	325246	SB1521
44-116	357009	19	B2103	9C	BS			10/7/2019 14:40	2	682	c	0	0	0	325246	SB1521
44-116	357009	20	B2103	9C	BD			10/7/2019 14:43	2	219	c	60	1	0	325246	SB1521
44-116	357009	21	B2103	8C	BS			10/7/2019 15:24	2	591	c	0	0	0	325246	SB1521
44-116	357009	23	B2103	8C	BD			10/7/2019 15:29	2	359	c	60	1	0	325246	SB1521
44-116	357009	24			BD	PSBKG		10/7/2019 15:33	2	190	c	60	1	0	325246	SB1521
44-116	357009	25			BD		PSCHK	10/7/2019 15:38	2	2564	c	60	1	1	325246	SB1521

WB

mmr 10/20/19

Summary 2019-1172  
 pg 10 of 12

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 Alarm=0	No	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/7/2019 6:49	1	168 c		60	1		0	325261	WDC1111
44-116	357439	1			BD		PRCHK	10/7/2019 7:00	1	2308 c		60	1		1	325261	WDC1111
44-116	357439	2	B2103	FLDBK	BD			10/7/2019 8:22	1	227 c		60	1		0	325261	WDC1111
44-116	357439	3	B2103	FLDBK	BD			10/7/2019 8:23	1	175 c		60	1		0	325261	WDC1111
44-116	357439	4	B2103	FLDBK	BD			10/7/2019 8:25	1	211 c		60	1		0	325261	WDC1111
44-116	357439	5	B2103	FLDBK	BD			10/7/2019 8:26	1	226 c		60	1		0	325261	WDC1111
44-116	357439	6	B2103	FLDBK	BD			10/7/2019 8:27	1	186 c		60	1		0	325261	WDC1111
44-116	357439	7	B2103	G4	BS			10/7/2019 8:58	1	372 c		0	0		0	325261	WDC1111
44-116	357439	8	B2103	G4	BD			10/7/2019 8:59	1	247 c		60	1		0	325261	WDC1111
44-116	357439	9	B2103	G5	BS			10/7/2019 9:28	1	388 c		0	0		0	325261	WDC1111
44-116	357439	10	B2103	G5	BD			10/7/2019 9:29	1	198 c		60	1		0	325261	WDC1111
44-116	357439	11	B2103	G6	BD			10/7/2019 9:58	1	404 c		0	0		0	325261	WDC1111
44-116	357439	12	B2103	G6	BD			10/7/2019 9:59	1	287 c		60	1		0	325261	WDC1111
44-116	357439	13	B2103	G7	BS			10/7/2019 12:28	1	373 c		0	0		0	325261	WDC1111
44-116	357439	14	B2103	G7	BD			10/7/2019 12:30	1	331 c		60	1		0	325261	WDC1111
44-116	357439	15	B2103	G8	BS			10/7/2019 13:01	1	376 c		0	0		0	325261	WDC1111
44-116	357439	16	B2103	G8	BD			10/7/2019 13:03	1	285 c		60	1		0	325261	WDC1111
44-116	357439	17	B2103	G9	BS			10/7/2019 13:34	1	406 c		0	0		0	325261	WDC1111
44-116	357439	18	B2103	G9	BD			10/7/2019 13:37	1	348 c		60	1		0	325261	WDC1111
44-116	357439	19	B2103	G10	BS			10/7/2019 14:08	1	349 c		0	0		0	325261	WDC1111
44-116	357439	20	B2103	G10	BD			10/7/2019 14:09	1	313 c		60	1		0	325261	WDC1111
44-116	357439	21	B2103	G12	BS			10/7/2019 14:45	1	424 c		0	0		0	325261	WDC1111
44-116	357439	22	B2103	G12	BD			10/7/2019 14:47	1	261 c		60	1		0	325261	WDC1111
44-116	357439	23	B2103	G14	BS			10/7/2019 15:29	1	423 c		0	0		0	325261	WDC1111
44-116	357439	24	B2103	G14	BD			10/7/2019 15:33	1	342 c		60	1		0	325261	WDC1111
44-116	357439	25			BD	PSBKG		10/7/2019 15:52	1	175 c		60	1		0	325261	WDC1111
44-116	357439	26			BD		PSCHK	10/7/2019 15:54	1	2304 c		60	1		1	325261	WDC1111

## B2-010-103 [D] FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	222981	0			BD	PRBKG	PRCHK	10/7/2019 7:01	3	169	c	60	1	0	126195	MJD
44-116	222981	1			BD			10/7/2019 7:08	3	1719	c	60	1	1	126195	MJD
44-116	222981	2	B2103	FLDBK	BD			10/7/2019 7:48	3	196	c	60	1	0	126195	MJD
44-116	222981	3	B2103	FLDBK	BD			10/7/2019 7:50	3	230	c	60	1	0	126195	MJD
44-116	222981	4	B2103	FLDBK	BD			10/7/2019 7:51	3	211	c	60	1	0	126195	MJD
44-116	222981	5	B2103	FLDBK	BD			10/7/2019 7:52	3	213	c	60	1	0	126195	MJD
44-116	222981	6	B2103	FLDBK	BD			10/7/2019 7:53	3	228	c	60	1	0	126195	MJD
44-116	222981	7	B2103	D4	BS			10/7/2019 8:15	3	454	c	0	0	0	126195	MJD
44-116	222981	8	B2103	D4	BD			10/7/2019 8:16	3	183	c	60	1	0	126195	MJD
44-116	222981	9	B2103	D5	BS			10/7/2019 8:39	3	469	c	0	0	0	126195	MJD
44-116	222981	10	B2103	D5	BD			10/7/2019 8:41	3	160	c	60	1	0	126195	MJD
44-116	222981	16	B2103	FLDBK	BD			10/7/2019 9:02	3	339	c	60	1	0	126195	MJD
44-116	222981	17	B2103	FLDBK	BD			10/7/2019 9:03	3	337	c	60	1	0	126195	MJD
44-116	222981	18	B2103	FLDBK	BD			10/7/2019 9:04	3	302	c	60	1	0	126195	MJD
44-116	222981	19	B2103	FLDBK	BD			10/7/2019 9:05	3	324	c	60	1	0	126195	MJD
44-116	222981	20	B2103	FLDBK	BD			10/7/2019 9:06	3	300	c	60	1	0	126195	MJD
44-116	222981	21	B2103	D8	BS			10/7/2019 9:39	3	517	c	0	0	0	126195	MJD
44-116	222981	22	B2103	D8	BD			10/7/2019 9:40	3	208	c	60	1	0	126195	MJD
44-116	222981	23	B2103	D10	BD			10/7/2019 9:54	3	312	c	60	1	0	126195	MJD
44-116	222981	24	B2103	D10	BD			10/7/2019 9:58	3	323	c	60	1	0	126195	MJD
44-116	222981	25	B2103	D10	BS			10/7/2019 10:04	3	514	c	0	0	0	126195	MJD
44-116	222981	26	B2103	D10	BD			10/7/2019 10:06	3	312	c	60	1	0	126195	MJD
44-116	222981	27	B2103	D10	BD			10/7/2019 10:08	3	214	c	60	1	0	126195	MJD
44-116	222981	28	B2103	D9	BS			10/7/2019 12:37	3	525	c	0	0	0	126195	MJD
44-116	222981	29	B2103	D9	BD			10/7/2019 12:38	3	292	c	60	1	0	126195	MJD
44-116	222981	30			BD	PSBKG		10/7/2019 12:48	3	158	c	60	1	0	126195	MJD
44-116	222981	31			BD		PSCHK	10/7/2019 12:55	3	1735	c	60	1	1	126195	MJD

Summary # 2019-1211

CB



## B2-010-103 C FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG		10/8/2019 6:40	2	188	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/8/2019 6:46	2	2561	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/8/2019 7:31	2	373	c	60	1	0	325245	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/8/2019 7:32	2	321	c	60	1	0	325245	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/8/2019 7:34	2	342	c	60	1	0	325245	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/8/2019 7:35	2	328	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/8/2019 7:36	2	328	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	7C	BS			10/8/2019 7:59	2	574	c	0	0	0	325246	SB1521
44-116	357009	8	B2103	7C	BD			10/8/2019 8:09	2	295	c	60	1	0	325246	SB1521
44-116	357009	9	B2103	6C	BS			10/8/2019 8:42	2	538	c	0	0	0	325246	SB1521
44-116	357009	10	B2103	6C	BD			10/8/2019 8:44	2	295	c	60	1	0	325246	SB1521
44-116	357009	11	B2103	5C	BS			10/8/2019 10:01	2	622	c	0	0	0	325246	SB1521
44-116	357009	12	B2103	5C	BD			10/8/2019 10:03	2	185	c	60	1	0	325246	SB1521
44-116	357009	13	B2103	4C	BS			10/8/2019 10:40	2	536	c	0	0	0	325246	SB1521
44-116	357009	14	B2103	4C	BD			10/8/2019 10:41	2	237	c	60	1	0	325246	SB1521
44-116	357009	15	B2103	3C	BS			10/8/2019 12:56	2	540	c	0	0	0	325246	SB1521
44-116	357009	16	B2103	3C	BD			10/8/2019 12:59	2	309	c	60	1	0	325246	SB1521
44-116	357009	17	B2103	2C	BS			10/8/2019 13:30	2	612	c	0	0	0	325246	SB1521
44-116	357009	18	B2103	2C	BD			10/8/2019 13:32	2	201	c	60	1	0	325246	SB1521
44-116	357009	19	B2103	1C	BS			10/8/2019 14:08	2	656	c	0	0	0	325246	SB1521
44-116	357009	20	B2103	1C	BD			10/8/2019 14:09	2	201	c	60	1	0	325246	SB1521
44-116	357009	21			BD	PSBKG		10/8/2019 14:19	2	195	c	60	1	0	325246	SB1521
44-116	357009	22			BD		PSCHK	10/8/2019 14:28	2	2552	c	60	1	1	325246	SB1521

CWB

Survey # 2019-1179  
PS 10 of 12

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/8/2019 6:55		1	198 c	60	1	0	325261	WDC1111
44-116	357439	1			BD		PRCHK	10/8/2019 6:58		1	2316 c	60	1	1	325261	WDC1111
44-116	357439	2	B2103	FLDBK	BD			10/8/2019 8:22		1	269 c	60	1	0	325261	WDC1111
44-116	357439	3	B2103	FLDBK	BD			10/8/2019 8:23		1	293 c	60	1	0	325261	WDC1111
44-116	357439	4	B2103	FLDBK	BD			10/8/2019 8:25		1	267 c	60	1	0	325261	WDC1111
44-116	357439	5	B2103	FLDBK	BD			10/8/2019 8:26		1	291 c	60	1	0	325261	WDC1111
44-116	357439	6	B2103	FLDBK	BD			10/8/2019 8:27		1	302 c	60	1	0	325261	WDC1111
44-116	357439	7	B2103	H8	BS			10/8/2019 8:57		1	298 c	0	0	0	325261	WDC1111
44-116	357439	8	B2103	H8	BD			10/8/2019 9:00		1	276 c	60	1	0	325261	WDC1111
44-116	357439	9	B2103	H9	BS			10/8/2019 9:30		1	358 c	0	0	0	325261	WDC1111
44-116	357439	10	B2103	H9	BD			10/8/2019 9:33		1	344 c	60	1	0	325261	WDC1111
44-116	357439	11	B2103	H10	BS			10/8/2019 10:07		1	392 c	0	0	0	325261	WDC1111
44-116	357439	12	B2103	H10	BD			10/8/2019 10:10		1	333 c	60	1	0	325261	WDC1111
44-116	357439	13	B2103	H11	BS			10/8/2019 12:31		1	367 c	0	0	0	325261	WDC1111
44-116	357439	14	B2103	H11	BD			10/8/2019 12:33		1	328 c	60	1	0	325261	WDC1111
44-116	357439	15	B2103	H6	BS			10/8/2019 13:00		1	381 c	0	0	0	325261	WDC1111
44-116	357439	16	B2103	H6	BD			10/8/2019 13:01		1	307 c	60	1	0	325261	WDC1111
44-116	357439	17	B2103	H13	BS			10/8/2019 13:30		1	414 c	0	0	0	325261	WDC1111
44-116	357439	18	B2103	H13	BD			10/8/2019 13:32		1	223 c	60	1	0	325261	WDC1111
44-116	357439	19	B2103	H14	BS			10/8/2019 14:01		1	365 c	0	0	0	325261	WDC1111
44-116	357439	20	B2103	H14	BD			10/8/2019 14:03		1	348 c	60	1	0	325261	WDC1111
44-116	357439	21	B2103	H7	BS			10/8/2019 14:30		1	394 c	0	0	0	325261	WDC1111
44-116	357439	22	B2103	H7	BD			10/8/2019 14:32		1	299 c	60	1	0	325261	WDC1111
44-116	357439	23	B2103	H12	BS			10/8/2019 15:00		1	370 c	0	0	0	325261	WDC1111
44-116	357439	24	B2103	H12	BD			10/8/2019 15:02		1	363 c	60	1	0	325261	WDC1111
44-116	357439	25	B2103	H15	BS			10/8/2019 15:41		1	425 c	0	0	0	325261	WDC1111
44-116	357439	26	B2103	H15	BD			10/8/2019 15:43		1	291 c	60	1	0	325261	WDC1111
44-116	357439	27			BD	PSBKG		10/8/2019 15:48		1	189 c	60	1	0	325261	WDC1111
44-116	357439	28			BD		PRCHK	10/8/2019 15:51		1	2283 c	60	1	1	325261	WDC1111

## B2-010-103F

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	222981	0			BD	PRBKG		10/9/2019 7:17	3	176	c	60	1	0	126195	MJD
44-116	222981	1			BD		PRCHK	10/9/2019 7:21	3	2013	c	60	1	1	126195	MJD
44-116	222981	7	B2103	FLDBK	BD			10/9/2019 8:04	3	341	c	60	1	0	126195	MJD
44-116	222981	8	B2103	FLDBK	BD			10/9/2019 8:06	3	331	c	60	1	0	126195	MJD
44-116	222981	9	B2103	FLDBK	BD			10/9/2019 8:07	3	362	c	60	1	0	126195	MJD
44-116	222981	10	B2103	FLDBK	BD			10/9/2019 8:08	3	366	c	60	1	0	126195	MJD
44-116	222981	11	B2103	FLDBK	BD			10/9/2019 8:09	3	333	c	60	1	0	126195	MJD
44-116	222981	12	B2103	F1	BS			10/9/2019 8:43	3	606	c	0	0	0	126195	MJD
44-116	222981	13	B2103	F1	BD			10/9/2019 8:52	3	246	c	60	1	0	126195	MJD
44-116	222981	14	B2103	F2	BS			10/9/2019 9:26	3	526	c	0	0	0	126195	MJD
44-116	222981	15	B2103	F2	BD			10/9/2019 9:30	3	267	c	60	1	0	126195	MJD
44-116	222981	16	B2103	F3	BS			10/9/2019 10:32	3	581	c	0	0	0	126195	MJD
44-116	222981	17	B2103	F3	BD			10/9/2019 10:35	3	208	c	60	1	0	126195	MJD
44-116	222981	18	B2103	F4	BS			10/9/2019 10:59	3	575	c	0	0	0	126195	MJD
44-116	222981	19	B2103	F4	BD			10/9/2019 11:02	3	233	c	60	1	0	126195	MJD
44-116	222981	20	B2103	F5	BS			10/9/2019 12:31	3	603	c	0	0	0	126195	MJD
44-116	222981	21	B2103	F5	BD			10/9/2019 12:34	3	224	c	60	1	0	126195	MJD
44-116	222981	22	B2103	F6	BS			10/9/2019 13:02	3	586	c	0	0	0	126195	MJD
44-116	222981	23	B2103	F6	BD			10/9/2019 13:04	3	286	c	60	1	0	126195	MJD
44-116	222981	24	B2103	F8	BS			10/9/2019 14:24	3	586	c	0	0	0	126195	MJD
44-116	222981	25	B2103	F8	BD			10/9/2019 14:27	3	253	c	60	1	0	126195	MJD
44-116	222981	26	B2103	F7	BS			10/9/2019 14:53	3	596	c	0	0	0	126195	MJD
44-116	222981	27	B2103	F7	BD			10/9/2019 14:56	3	241	c	60	1	0	126195	MJD
44-116	222981	28	B2103	F9	BS			10/9/2019 15:50	3	606	c	0	0	0	126195	MJD
44-116	222981	29	B2103	F9	BD			10/9/2019 15:52	3	236	c	60	1	0	126195	MJD
44-116	222981	30			BD	PSBKG		10/9/2019 16:01	3	219	c	60	1	0	126195	MJD
44-116	222981	31			BD		PSCHK	10/9/2019 16:05	3	2041	c	60	1	1	126195	MJD

Survey # 2019-1191

WR

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/9/2019 7:58		1	192 c	60	1	0	325261	WDC1111
44-116	357439	1			BD		PRCHK	10/9/2019 8:01		1	2408 c	60	1	1	325261	WDC1111
44-116	357439	3	B2103	FLDBK	BD			10/9/2019 8:25		1	284 c	60	1	0	325261	WDC1111
44-116	357439	4	B2103	FLDBK	BD			10/9/2019 8:26		1	275 c	60	1	0	325261	WDC1111
44-116	357439	5	B2103	FLDBK	BD			10/9/2019 8:28		1	282 c	60	1	0	325261	WDC1111
44-116	357439	6	B2103	FLDBK	BD			10/9/2019 8:29		1	278 c	60	1	0	325261	WDC1111
44-116	357439	7	B2103	FLDBK	BD			10/9/2019 8:30		1	314 c	60	1	0	325261	WDC1111
44-116	357439	8	B2103	G11	BS			10/9/2019 9:14		1	336 c	0	0	0	325261	WDC1111
44-116	357439	9	B2103	G11	BD			10/9/2019 9:16		1	178 c	60	1	0	325261	WDC1111
44-116	357439	10	B2103	G13	BS			10/9/2019 9:48		1	353 c	0	0	0	325261	WDC1111
44-116	357439	11	B2103	G13	BD			10/9/2019 9:50		1	284 c	60	1	0	325261	WDC1111
44-116	357439	12	B2103	G15	BS			10/9/2019 10:26		1	374 c	0	0	0	325261	WDC1111
44-116	357439	13	B2103	G15	BD			10/9/2019 10:28		1	280 c	60	1	0	325261	WDC1111
44-116	357439	14			BD	PSBKG		10/9/2019 12:17		1	183 c	60	1	0	325261	WDC1111
44-116	357439	15			BD		PSCHK	10/9/2019 12:19		1	2423 c	60	1	1	325261	WDC1111

Reviewed By:



 2019-1185  
 Page 9 of 11

## B2-010-103 QC GH FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG		10/9/2019 7:18	2	205	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/9/2019 7:22	2	2569	c	60	1	1	325246	SB1521
44-116	357009	2	G2103	FLDBK	BD			10/9/2019 10:11	2	274	c	60	1	0	325246	SB1521
44-116	357009	3	G2103	FLDBK	BD			10/9/2019 10:14	2	310	c	60	1	0	325246	SB1521
44-116	357009	4	G2103	FLDBK	BD			10/9/2019 10:15	2	284	c	60	1	0	325246	SB1521
44-116	357009	5	G2103	FLDBK	BD			10/9/2019 10:17	2	296	c	60	1	0	325246	SB1521
44-116	357009	6	G2103	FLDBK	BD			10/9/2019 10:18	2	322	c	60	1	0	325246	SB1521
44-116	357009	7	G2103	QC8H	BS			10/9/2019 12:57	2	550	c	0	0	0	325246	SB1521
44-116	357009	8	G2103	QC8H	BD			10/9/2019 12:59	2	304	c	60	1	0	325246	SB1521
44-116	357009	9	G2103	QC6G	BS			10/9/2019 13:58	2	546	c	0	0	0	325246	SB1521
44-116	357009	10	G2103	QC6G	BD			10/9/2019 14:00	2	267	c	60	1	0	325246	SB1521
44-116	357009	11			BD	PSBKG		10/9/2019 14:21	2	166	c	60	1	0	325246	SB1521
44-116	357009	12			BD		PSCHK	10/9/2019 14:24	2	2585	c	60	1	1	325246	SB1521

WB

## B2-010-103 B FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG		10/10/2019 9:20	2	182	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/10/2019 9:22	2	2502	c	60	1	1	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/10/2019 9:33	2	343	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/10/2019 9:35	2	339	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/10/2019 9:36	2	321	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	FLDBK	BD			10/10/2019 9:37	2	339	c	60	1	0	325246	SB1521
44-116	357009	8	B2103	FLDBK	BD			10/10/2019 9:39	2	362	c	60	1	0	325246	SB1521
44-116	357009	9	B2103	1B	BS			10/10/2019 10:08	2	424	c	0	0	0	325246	SB1521
44-116	357009	10	B2103	1B	BD			10/10/2019 10:09	2	320	c	60	1	0	325246	SB1521
44-116	357009	11	B2103	2B	BS			10/10/2019 10:29	2	330	c	0	0	0	325246	SB1521
44-116	357009	12	B2103	2B	BD			10/10/2019 10:31	2	285	c	60	1	0	325246	SB1521
44-116	357009	13	B2103	3B	BS			10/10/2019 10:44	2	395	c	0	0	0	325246	SB1521
44-116	357009	14	B2103	3B	BD			10/10/2019 10:45	2	331	c	60	1	0	325246	SB1521
44-116	357009	15	B2103	4B	BS			10/10/2019 12:55	2	410	c	0	0	0	325246	SB1521
44-116	357009	16	B2103	4B	BD			10/10/2019 13:00	2	314	c	60	1	0	325246	SB1521
44-116	357009	17	B2103	5B	BS			10/10/2019 13:23	2	384	c	0	0	0	325246	SB1521
44-116	357009	18	B2103	5B	BD			10/10/2019 13:25	2	372	c	60	1	0	325246	SB1521
44-116	357009	19	B2103	6B	BS			10/10/2019 13:43	2	497	c	0	0	0	325246	SB1521
44-116	357009	20	B2103	6B	BD			10/10/2019 13:45	2	309	c	60	1	0	325246	SB1521
44-116	357009	21	B2103	15B	BS			10/10/2019 14:17	2	566	c	0	0	0	325246	SB1521
44-116	357009	22	B2103	15B	BD			10/10/2019 14:19	2	282	c	60	1	0	325246	SB1521
44-116	357009	23	B2103	7B	BS			10/10/2019 14:50	2	380	c	0	0	0	325246	SB1521
44-116	357009	24	B2103	7B	BD			10/10/2019 14:51	2	289	c	60	1	0	325246	SB1521
44-116	357009	25			BD	PSBKG		10/10/2019 14:57	2	195	c	60	1	0	325246	SB1521
44-116	357009	26			BD		PSCHK	10/10/2019 15:00	2	2460	c	60	1	1	325246	SB1521



## B2-010-103 F FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	222981	0			BD	PRBKG		10/10/2019 10:30	3	187	c	60	1	0	126195	MJD
44-116	222981	1			BD		PRCHK	10/10/2019 10:34	3	1985	c	60	1	1	126195	MJD
44-116	222981	2	103F	FLDBK	BD			10/10/2019 10:49	3	344	c	60	1	0	126195	MJD
44-116	222981	3	103F	FLDBK	BD			10/10/2019 10:51	3	280	c	60	1	0	126195	MJD
44-116	222981	4	103F	FLDBK	BD			10/10/2019 10:52	3	296	c	60	1	0	126195	MJD
44-116	222981	5	103F	FLDBK	BD			10/10/2019 10:54	3	333	c	60	1	0	126195	MJD
44-116	222981	6	103F	FLDBK	BD			10/10/2019 10:55	3	294	c	60	1	0	126195	MJD
44-116	222981	7	103F	F10	BS			10/10/2019 12:46	3	568	c	0	0	0	126195	MJD
44-116	222981	8	103F	F10	BD			10/10/2019 12:48	3	186	c	60	1	0	126195	MJD
44-116	222981	9	103F	F11	BS			10/10/2019 13:14	3	504	c	0	0	0	126195	MJD
44-116	222981	10	103F	F11	BD			10/10/2019 13:16	3	187	c	60	1	0	126195	MJD
44-116	222981	11	103F	F13	BS			10/10/2019 13:40	3	530	c	0	0	0	126195	MJD
44-116	222981	12	103F	F13	BD			10/10/2019 13:42	3	182	c	60	1	0	126195	MJD
44-116	222981	13	103F	F14	BS			10/10/2019 14:13	3	546	c	0	0	0	126195	MJD
44-116	222981	14	103F	F14	BD			10/10/2019 14:15	3	187	c	60	1	0	126195	MJD
44-116	222981	15	103F	F15	BS			10/10/2019 14:56	3	548	c	0	0	0	126195	MJD
44-116	222981	16	103F	F15	BD			10/10/2019 14:58	3	212	c	60	1	0	126195	MJD
44-116	222981	17			BD	PSBKG		10/10/2019 15:07	3	194	c	60	1	0	126195	MJD
44-116	222981	18			BD		PSCHK	10/10/2019 15:11	3	1994	c	60	1	1	126195	MJD

WJZ

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 Alarm=0	No	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/10/2019 12:40		1	194 c	60	1		0	325261	WDC1111
44-116	357439	1			BD		PRCHK	10/10/2019 12:42		1	2400 c	60	1		1	325261	WDC1111
44-116	357439	2	B2103	FLDBK	BD			10/10/2019 13:04		1	204 c	60	1		0	325261	WDC1111
44-116	357439	3	B2103	FLDBK	BD			10/10/2019 13:05		1	206 c	60	1		0	325261	WDC1111
44-116	357439	4	B2103	FLDBK	BD			10/10/2019 13:06		1	202 c	60	1		0	325261	WDC1111
44-116	357439	5	B2103	FLDBK	BD			10/10/2019 13:07		1	200 c	60	1		0	325261	WDC1111
44-116	357439	6	B2103	FLDBK	BD			10/10/2019 13:08		1	187 c	60	1		0	325261	WDC1111
44-116	357439	7	B2103	E1	BS			10/10/2019 13:55		1	253 c	0	0		0	325261	WDC1111
44-116	357439	8	B2103	E1	BD			10/10/2019 13:57		1	223 c	60	1		0	325261	WDC1111
44-116	357439	9	B2103	E2	BS			10/10/2019 14:08		1	327 c	0	0		0	325261	WDC1111
44-116	357439	10	B2103	E2	BD			10/10/2019 14:09		1	201 c	60	1		0	325261	WDC1111
44-116	357439	11	B2103	E3	BS			10/10/2019 14:18		1	255 c	0	0		0	325261	WDC1111
44-116	357439	12	B2103	E3	BD			10/10/2019 14:20		1	209 c	60	1		0	325261	WDC1111
44-116	357439	13	B2103	E4	BS			10/10/2019 14:28		1	262 c	0	0		0	325261	WDC1111
44-116	357439	14	B2103	E4	BD			10/10/2019 14:29		1	185 c	60	1		0	325261	WDC1111
44-116	357439	15	B2103	E5	BS			10/10/2019 14:39		1	245 c	0	0		0	325261	WDC1111
44-116	357439	16	B2103	E5	BD			10/10/2019 14:41		1	211 c	60	1		0	325261	WDC1111
44-116	357439	17			BD	PSBKG		10/10/2019 14:46		1	182 c	60	1		0	325261	WDC1111
44-116	357439	18			BD		PSCHK	10/10/2019 14:48		1	2391 c	60	1		1	325261	WDC1111





## B2-010-103 B FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG		10/15/2019 7:59	2	208	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/15/2019 8:02	2	2531	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/15/2019 8:09	2	334	c	60	1	0	325246	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/15/2019 8:11	2	342	c	60	1	0	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/15/2019 8:12	2	309	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/15/2019 8:14	2	328	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/15/2019 8:15	2	365	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	8B	BS			10/15/2019 9:22	2	545	c	0	0	0	325246	SB1521
44-116	357009	9	B2103	8B	BD			10/15/2019 9:24	2	241	c	60	1	0	325246	SB1521
44-116	357009	10	B2103	9B	BS			10/15/2019 9:41	2	593	c	0	0	0	325246	SB1521
44-116	357009	11	B2103	9B	BD			10/15/2019 9:45	2	274	c	60	1	0	325246	SB1521
44-116	357009	12	B2103	10B	BS			10/15/2019 10:08	2	620	c	0	0	0	325246	SB1521
44-116	357009	13	B2103	10B	BD			10/15/2019 10:10	2	261	c	60	1	0	325246	SB1521
44-116	357009	15	B2103	11B	BS			10/15/2019 10:41	2	622	c	0	0	0	325246	SB1521
44-116	357009	16	B2103	11B	BD			10/15/2019 10:43	2	260	c	60	1	0	325246	SB1521
44-116	357009	17	B2103	12B	BS			10/15/2019 12:56	2	556	c	0	0	0	325246	SB1521
44-116	357009	18	B2103	12B	BD			10/15/2019 13:00	2	267	c	60	1	0	325246	SB1521
44-116	357009	19	B2103	13B	BS			10/15/2019 13:29	2	499	c	0	0	0	325246	SB1521
44-116	357009	20	B2103	13B	BD			10/15/2019 13:30	2	248	c	60	1	0	325246	SB1521
44-116	357009	21	B2103	14B	BS			10/15/2019 14:33	2	606	c	0	0	0	325246	SB1521
44-116	357009	22	B2103	14B	BD			10/15/2019 14:36	2	229	c	60	1	0	325246	SB1521
44-116	357009	23			BD	PSBKG		10/15/2019 14:39	2	190	c	60	1	0	325246	SB1521
44-116	357009	24			BD		PSCHK	10/15/2019 14:45	2	2469	c	60	1	1	325246	SB1521

Reviewed By:

WB

10-21-19 10 12  
SAB Page 7 of

2019-1180

## B2-010-103 C FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 Alarm=0	Inst Serial Number	Tech Name
44-116	222981	0			BD	PRBKG		10/15/2019 7:37	3	155	c	60	1	0	126195	MJD
44-116	222981	1			BD		PRCHK	10/15/2019 7:41	3	2018	c	60	1	1	126195	MJD
44-116	222981	2		FLDBK	BD			10/15/2019 8:11	3	284	c	60	1	0	126195	MJD
44-116	222981	3		FLDBK	BD			10/15/2019 8:12	3	293	c	60	1	0	126195	MJD
44-116	222981	4		FLDBK	BD			10/15/2019 8:14	3	274	c	60	1	0	126195	MJD
44-116	222981	5		FLDBK	BD			10/15/2019 8:15	3	301	c	60	1	0	126195	MJD
44-116	222981	6		FLDBK	BD			10/15/2019 8:16	3	327	c	60	1	0	126195	MJD
44-116	222981	7	B2103	12F	BS			10/15/2019 8:55	3	476	c	0	0	0	126195	MJD
44-116	222981	8	B2103	12F	BD			10/15/2019 8:57	3	185	c	60	1	0	126195	MJD
44-116	222981	9			BD	PSBKG		10/15/2019 9:04	3	191	c	60	1	0	126195	MJD
44-116	222981	10			BD		PSCHK	10/15/2019 9:08	3	1968	c	60	1	1	126195	MJD

WB

Reviewed By:

None detected  
Page ofSummary # 2019-1181  
pg 9 of 11

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit-Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 Alarm=0	No	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/15/2019 9:12		1	180 c	60	1		0	325261	WDC1111
44-116	357439	1			BD		PRCHK	10/15/2019 9:15		1	2446 c	60	1		1	325261	WDC1111
44-116	357439	2	B2103	FLDBK	BD			10/15/2019 9:31		1	183 c	60	1		0	325261	WDC1111
44-116	357439	3	B2103	FLDBK	BD			10/15/2019 9:33		1	204 c	60	1		0	325261	WDC1111
44-116	357439	4	B2103	FLDBK	BD			10/15/2019 9:34		1	211 c	60	1		0	325261	WDC1111
44-116	357439	5	B2103	FLDBK	BD			10/15/2019 9:35		1	199 c	60	1		0	325261	WDC1111
44-116	357439	6	B2103	FLDBK	BD			10/15/2019 9:37		1	176 c	60	1		0	325261	WDC1111
44-116	357439	7	B2103	E9	BS			10/15/2019 10:13		1	286 c	0	0		0	325261	WDC1111
44-116	357439	8	B2103	E9	BD			10/15/2019 10:15		1	187 c	60	1		0	325261	WDC1111
44-116	357439	9	B2103	E6	BS			10/15/2019 10:23		1	238 c	0	0		0	325261	WDC1111
44-116	357439	10	B2103	E6	BD			10/15/2019 10:27		1	190 c	60	1		0	325261	WDC1111
44-116	357439	11	B2103	E10	BS			10/15/2019 12:48		1	265 c	0	0		0	325261	WDC1111
44-116	357439	12	B2103	E10	BD			10/15/2019 12:50		1	201 c	60	1		0	325261	WDC1111
44-116	357439	13	B2103	E7	BS			10/15/2019 13:02		1	255 c	0	0		0	325261	WDC1111
44-116	357439	14	B2103	E7	BD			10/15/2019 13:05		1	191 c	60	1		0	325261	WDC1111
44-116	357439	15	B2103	E12	BS			10/15/2019 13:34		1	220 c	0	0		0	325261	WDC1111
44-116	357439	16	B2103	E12	BD			10/15/2019 13:36		1	181 c	60	1		0	325261	WDC1111
44-116	357439	17	B2103	E13	BS			10/15/2019 13:50		1	224 c	0	0		0	325261	WDC1111
44-116	357439	18	B2103	E13	BD			10/15/2019 13:53		1	213 c	60	1		0	325261	WDC1111
44-116	357439	19	B2103	E14	BS			10/15/2019 14:07		1	267 c	0	0		0	325261	WDC1111
44-116	357439	20	B2103	E14	BD			10/15/2019 14:09		1	245 c	60	1		0	325261	WDC1111
44-116	357439	21	B2103	E15	BS			10/15/2019 14:30		1	297 c	0	0		0	325261	WDC1111
44-116	357439	22	B2103	E15	BS			10/15/2019 14:32		1	205 c	60	1		0	325261	WDC1111
44-116	357439	23	B2103	E11	BS			10/15/2019 15:17		1	275 c	0	0		0	325261	WDC1111
44-116	357439	24	B2103	E11	BD			10/15/2019 15:19		1	233 c	60	1		0	325261	WDC1111
44-116	357439	25	B2103	E8	BS			10/15/2019 15:29		1	286 c	0	0		0	325261	WDC1111
44-116	357439	26	B2103	E8	BD			10/15/2019 15:31		1	194 c	60	1		0	325261	WDC1111
44-116	357439	27	B2103	QCB13	BS			10/15/2019 15:55		1	274 c	0	0		0	325261	WDC1111
44-116	357439	28	B2103	QCB13	BD			10/15/2019 15:57		1	186 c	60	1		0	325261	WDC1111
44-116	357439	29			BD	PSBKG		10/15/2019 16:08		1	177 c	60	1		0	325261	WDC1111
44-116	357439	30			BD		PSCHK	10/15/2019 16:10		1	2466 c	60	1		1	325261	WDC1111

# B2-010-103 B FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG	*	10/15/2019 15:04	2	198	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/15/2019 15:07	2	2525	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/15/2019 15:31	2	148	c	60	1	0	325246	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/15/2019 15:33	2	180	c	60	1	0	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/15/2019 15:34	2	204	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/15/2019 15:36	2	166	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/15/2019 15:37	2	176	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	QC6E	BS			10/15/2019 15:49	2	426	c	0	0	0	325246	SB1521
44-116	357009	8	B2103	QC6E	BD			10/15/2019 15:52	2	237	c	60	1	0	325246	SB1521
44-116	357009	9			BD	PSBKG		10/15/2019 15:57	2	202	c	60	1	0	325246	SB1521
44-116	357009	10			BD		PSCHK	10/15/2019 16:02	2	2477	c	60	1	1	325246	SB1521

Reviewed By:

WB

Page 9 of 11

\* 2019-1189

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit - Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 Alarm=0	No	Inst Serial Number	Tech Name
44-116	222981	0			BD	PRBKG		10/15/2019 12:33	3	156 c		60	0	0	0	126195 MJD	
44-116	222981	1			BD		PRCHK	10/15/2019 12:38	3	1957 c		60	1	0	0	126195 MJD	
44-116	222981	2	B2103	FLDBK	BD			10/15/2019 13:31	3	476 c		60	0	0	1	126195 MJD	
44-116	222981	3	B2103	FLDBK	BD			10/15/2019 13:33	3	543 c		60	0	0	1	126195 MJD	
44-116	222981	4	B2103	FLDBK	BD			10/15/2019 13:34	3	503 c		60	0	0	1	126195 MJD	
44-116	222981	5	B2103	FLDBK	BD			10/15/2019 13:35	3	543 c		60	0	0	1	126195 MJD	
44-116	222981	6	B2103	FLDBK	BD			10/15/2019 13:36	3	509 c		60	0	0	1	126195 MJD	
44-116	222981	7	B2103	A17	BS			10/15/2019 13:58	3	757 c		0	0	0	0	126195 MJD	
44-116	222981	8	B2103	A17	BD			10/15/2019 14:00	3	515 c		60	0	0	1	126195 MJD	
44-116	222981	9	B2103	A18	BD			10/15/2019 14:09	3	512 c		60	0	0	1	126195 MJD	
44-116	222981	10	B2103	A18	BS			10/15/2019 14:13	3	560 c		0	0	0	0	126195 MJD	
44-116	222981	11	B2103	D18	BD			10/15/2019 14:25	3	555 c		60	0	0	1	126195 MJD	
44-116	222981	12	B2103	D18	BS			10/15/2019 14:29	3	718 c		0	0	0	0	126195 MJD	
44-116	222981	13	B2103	D19	BD			10/15/2019 14:42	3	552 c		60	0	0	1	126195 MJD	
44-116	222981	14	B2103	D19	BS			10/15/2019 14:47	3	639 c		0	0	0	0	126195 MJD	
44-116	222981	16	B2103	FLDBK	BD			10/15/2019 15:20	3	194 c		60	0	0	0	126195 MJD	
44-116	222981	17	B2103	FLDBK	BD			10/15/2019 15:21	3	213 c		60	0	0	0	126195 MJD	
44-116	222981	18	B2103	FLDBK	BD			10/15/2019 15:22	3	219 c		60	0	0	0	126195 MJD	
44-116	222981	19	B2103	FLDBK	BD			10/15/2019 15:23	3	220 c		60	0	0	0	126195 MJD	
44-116	222981	20	B2103	FLDBK	BD			10/15/2019 15:25	3	224 c		60	0	0	0	126195 MJD	
44-116	222981	21	B2103	A19	BS			10/15/2019 15:39	3	435 c		0	0	0	0	126195 MJD	
44-116	222981	22	B2103	A19	BD			10/15/2019 15:41	3	231 c		60	0	0	0	126195 MJD	
44-116	222981	23	B2103	A20	BS			10/15/2019 15:47	3	436 c		0	0	0	0	126195 MJD	
44-116	222981	24	B2103	A20	BD			10/15/2019 15:49	3	233 c		60	0	0	0	126195 MJD	
44-116	222981	25			BD	PSBKG		10/15/2019 16:02	3	201 c		60	0	0	0	126195 MJD	
44-116	222981	26			BD	PSCHK		10/15/2019 16:06	3	1951 c		60	1	1	1	126195 MJD	

# B2-010-103 Drains Vents QC FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/16/2019 15:25	1	206	c	60	1	0	325261	SB1521
44-116	357439	1			BD		PRCHK	10/16/2019 15:28	1	2490	c	60	1	1	325261	SB1521
44-116	357439	2	B2103	FLDBK	BD			10/16/2019 15:33	1	252	c	60	1	0	325261	SB1521
44-116	357439	3	B2103	FLDBK	BD			10/16/2019 15:35	1	287	c	60	1	0	325261	SB1521
44-116	357439	4	B2103	FLDBK	BD			10/16/2019 15:36	1	278	c	60	1	0	325261	SB1521
44-116	357439	5	B2103	FLDBK	BD			10/16/2019 15:37	1	324	c	60	1	0	325261	SB1521
44-116	357439	6	B2103	FLDBK	BD			10/16/2019 15:39	1	257	c	60	1	0	325261	SB1521
44-116	357439	7	B2103	QCDR1	BS			10/16/2019 15:49	1	350	c	0	0	0	325261	SB1521
44-116	357439	8	B2103	QCDR1	BD			10/16/2019 15:50	1	228	c	60	1	0	325261	SB1521
44-116	357439	9	B2103	QCV22	BS			10/16/2019 15:55	1	356	c	0	0	0	325261	SB1521
44-116	357439	10	B2103	QCV22	BD			10/16/2019 15:56	1	222	c	60	1	0	325261	SB1521
44-116	357439	11	B2103	QCV1	BS			10/16/2019 16:00	1	303	c	0	0	0	325261	SB1521
44-116	357439	12	B2103	QCV1	BD			10/16/2019 16:01	1	227	c	60	1	0	325261	SB1521
44-116	357439	13			BD	PSBKG		10/16/2019 16:04	1	182	c	60	1	0	325261	SB1521
44-116	357439	14			BD		PSCHK	10/16/2019 16:07	1	2453	c	60	1	1	325261	SB1521

W13

## B2-010-103

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 Alarm=0	No	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG		10/16/2019 7:54		1	190 c	60	1		0	325261	WDC1111
44-116	357439	1			BD		PRCHK	10/16/2019 8:13		1	2536 c	60	1		1	325261	WDC1111
44-116	357439	2	B2103	FLDBK	BD			10/16/2019 8:27		1	235 c	60	1		0	325261	WDC1111
44-116	357439	3	B2103	FLDBK	BD			10/16/2019 8:28		1	232 c	60	1		0	325261	WDC1111
44-116	357439	4	B2103	FLDBK	BD			10/16/2019 8:30		1	236 c	60	1		0	325261	WDC1111
44-116	357439	5	B2103	FLDBK	BD			10/16/2019 8:31		1	232 c	60	1		0	325261	WDC1111
44-116	357439	6	B2103	FLDBK	BD			10/16/2019 8:33		1	245 c	60	1		0	325261	WDC1111
44-116	357439	7	B2103	QCA9	BS			10/16/2019 9:10		1	343 c	0	0		0	325261	WDC1111
44-116	357439	8	B2103	QCA9	BD			10/16/2019 9:11		1	217 c	60	1		0	325261	WDC1111
44-116	357439	9	B2103	QCC13	BS			10/16/2019 9:47		1	421 c	0	0		0	325261	WDC1111
44-116	357439	10	B2103	QCC13	BD			10/16/2019 9:49		1	317 c	60	1		0	325261	WDC1111
44-116	357439	11			BD	PSBKG		10/16/2019 9:51		1	184 c	60	1		0	325261	WDC1111
44-116	357439	12			BD		PSCHK	10/16/2019 9:54		1	2498 c	60	1		1	325261	WDC1111

Reviewed By:



 2019-1138  
 Page 10 of 12

B2-010-103D20191009\_160428\_LOG WMB

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG		10/16/2019 7:10	2	198	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/16/2019 7:15	2	2458	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/16/2019 8:29	2	339	c	60	1	0	325246	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/16/2019 8:30	2	328	c	60	1	0	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/16/2019 8:31	2	318	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/16/2019 8:33	2	331	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/16/2019 8:34	2	302	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	QC2D	BS			10/16/2019 8:55	2	371	c	0	0	0	325246	SB1521
44-116	357009	8	B2103	QC2D	BD			10/16/2019 9:04	2	293	c	60	1	0	325246	SB1521
44-116	357009	9	B2103	QC5F	BS			10/16/2019 9:40	2	543	c	0	0	0	325246	SB1521
44-116	357009	10	B2103	QC5F	BD			10/16/2019 9:43	2	175	c	60	1	0	325246	SB1521
44-116	357009	11			BD	PSBKG		10/16/2019 9:50	2	196	c	60	1	0	325246	SB1521
44-116	357009	12			BD		PSCHK	10/16/2019 9:54	2	2564	c	60	1	1	325246	SB1521

WMB



# B2-010-103 A/B Drains FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG	PRCHK	10/16/2019 12:12	2	194	c	60	1	0	325246	SB1521
44-116	357009	1			BD			10/16/2019 12:15	2	2456	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/16/2019 12:26	2	297	c	60	1	0	325246	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/16/2019 12:27	2	299	c	60	1	0	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/16/2019 12:28	2	289	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/16/2019 12:30	2	306	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/16/2019 12:31	2	322	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	DRN1	BS			10/16/2019 12:42	2	476	c	0	0	0	325246	SB1521
44-116	357009	8	B2103	DRN1	BD			10/16/2019 12:44	2	240	c	60	1	0	325246	SB1521
44-116	357009	9	B2103	DRN2	BS			10/16/2019 12:47	2	337	c	0	0	0	325246	SB1521
44-116	357009	10	B2103	DRN2	BD			10/16/2019 12:49	2	231	c	60	1	0	325246	SB1521
44-116	357009	11	B2103	DRN3	BS			10/16/2019 12:54	2	296	c	0	0	0	325246	SB1521
44-116	357009	12	B2103	DRN3	BD			10/16/2019 12:58	2	225	c	60	1	0	325246	SB1521
44-116	357009	13	B2103	DRN4	BS			10/16/2019 13:32	2	304	c	0	0	0	325246	SB1521
44-116	357009	14	B2103	DRN4	BD			10/16/2019 13:34	2	237	c	60	1	0	325246	SB1521
44-116	357009	15	B2103	DRN5	BS			10/16/2019 13:44	2	430	c	0	0	0	325246	SB1521
44-116	357009	16	B2103	DRN5	BD			10/16/2019 13:46	2	315	c	60	1	0	325246	SB1521
44-116	357009	17			BD	PSBKG		10/16/2019 13:55	2	197	c	60	1	0	325246	SB1521
44-116	357009	18			BD		PSCHK	10/16/2019 14:03	2	2521	c	60	1	1	325246	SB1521

W/B

# B2-010-103 [Vents, Sinks, Fume Hood] FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	222981	0			BD	PRBKG	PRCHK	10/16/2019 7:24	3	169	c	60	1	0	126195	MJD
44-116	222981	1			BD			10/16/2019 7:27	3	2013	c	60	1	1	126195	MJD
44-116	222981	2	B2103	FLDBK	BD			10/16/2019 8:13	3	253	c	60	1	0	126195	MJD
44-116	222981	3	B2103	FLDBK	BD			10/16/2019 8:15	3	271	c	60	1	0	126195	MJD
44-116	222981	4	B2103	FLDBK	BD			10/16/2019 8:16	3	270	c	60	1	0	126195	MJD
44-116	222981	5	B2103	FLDBK	BD			10/16/2019 8:17	3	257	c	60	1	0	126195	MJD
44-116	222981	6	B2103	FLDBK	BD			10/16/2019 8:18	3	247	c	60	1	0	126195	MJD
44-116	222981	7	B2103	SNK7	BS			10/16/2019 8:45	3	458	c	0	0	0	126195	MJD
44-116	222981	8	B2103	SNK7	BS			10/16/2019 8:47	3	197	c	60	1	0	126195	MJD
44-116	222981	9	B2103	SNK8	BS			10/16/2019 8:54	3	450	c	0	0	0	126195	MJD
44-116	222981	10	B2103	SNK8	BD			10/16/2019 8:56	3	197	c	60	1	0	126195	MJD
44-116	222981	11	B2103	FHD1	BS			10/16/2019 9:15	3	450	c	0	0	0	126195	MJD
44-116	222981	12	B2103	FHD1	BD			10/16/2019 9:17	3	267	c	60	1	0	126195	MJD
44-116	222981	13	B2103	VNT1	BS			10/16/2019 12:19	3	488	c	0	0	0	126195	MJD
44-116	222981	14	B2103	VNT1	BD			10/16/2019 12:21	3	252	c	60	1	0	126195	MJD
44-116	222981	15	B2103	VNT2	BS			10/16/2019 12:29	3	472	c	0	0	0	126195	MJD
44-116	222981	16	B2103	VNT2	BD			10/16/2019 12:31	3	216	c	60	1	0	126195	MJD
44-116	222981	17	B2103	VNT3	BS			10/16/2019 12:34	3	438	c	0	0	0	126195	MJD
44-116	222981	18	B2103	VNT3	BD			10/16/2019 12:36	3	232	c	60	1	0	126195	MJD
44-116	222981	19	B2103	VNT4	BS			10/16/2019 12:44	3	459	c	0	0	0	126195	MJD
44-116	222981	20	B2103	VNT4	BD			10/16/2019 12:47	3	213	c	60	1	0	126195	MJD
44-116	222981	21	B2103	VNT5	BS			10/16/2019 12:53	3	462	c	0	0	0	126195	MJD
44-116	222981	22	B2103	VNT5	BD			10/16/2019 13:03	3	245	c	60	1	0	126195	MJD
44-116	222981	23	B2103	VNT6	BS			10/16/2019 13:08	3	458	c	0	0	0	126195	MJD
44-116	222981	24	B2103	VNT6	BD			10/16/2019 13:10	3	203	c	60	1	0	126195	MJD
44-116	222981	25	B2103	VNT7	BS			10/16/2019 13:14	3	470	c	0	0	0	126195	MJD
44-116	222981	27	B2103	VNT7	BD			10/16/2019 13:17	3	234	c	60	1	0	126195	MJD
44-116	222981	28	B2103	VNT8	BS			10/16/2019 14:12	3	484	c	0	0	0	126195	MJD
44-116	222981	29	B2103	VNT8	BD			10/16/2019 14:14	3	217	c	60	1	0	126195	MJD
44-116	222981	30	B2103	VNT9	BS			10/16/2019 14:18	3	491	c	0	0	0	126195	MJD
44-116	222981	31	B2103	VNT9	BD			10/16/2019 14:21	3	207	c	60	1	0	126195	MJD
44-116	222981	32	B2103	VNT10	BS			10/16/2019 14:26	3	473	c	0	0	0	126195	MJD
44-116	222981	33	B2103	VNT10	BD			10/16/2019 14:29	3	245	c	60	1	0	126195	MJD
44-116	222981	34	B2103	VNT11	BS			10/16/2019 14:32	3	513	c	0	0	0	126195	MJD
44-116	222981	35	B2103	VNT11	BD			10/16/2019 14:34	3	207	c	60	1	0	126195	MJD
44-116	222981	36	B2103	VNT12	BS			10/16/2019 14:39	3	379	c	0	0	0	126195	MJD
44-116	222981	37	B2103	VNT12	BD			10/16/2019 14:41	3	211	c	60	1	0	126195	MJD
44-116	222981	38	B2103	VNT13	BS			10/16/2019 14:48	3	405	c	0	0	0	126195	MJD
44-116	222981	39	B2103	VNT13	BD			10/16/2019 14:51	3	225	c	60	1	0	126195	MJD
44-116	222981	40			BD	PSBKG		10/16/2019 15:17	3	173	c	60	1	0	126195	MJD
44-116	222981	41			BD		PSCHK	10/16/2019 15:21	3	2002	c	60	1	1	126195	MJD

Reviewed By:

*WRB*

*Done 10/20/19*  
Page of

*Sunny H 2019-11-19*  
*PS 20 of 22*

# B2-010-103E QC FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357009	0			BD	PRBKG		10/17/2019 10:39	2	183	c	60	1	0	325246	SB1521
44-116	357009	1			BD		PRCHK	10/17/2019 10:41	2	2489	c	60	1	1	325246	SB1521
44-116	357009	2	B2103	FLDBK	BD			10/17/2019 12:20	2	271	c	60	1	0	325246	SB1521
44-116	357009	3	B2103	FLDBK	BD			10/17/2019 12:21	2	237	c	60	1	0	325246	SB1521
44-116	357009	4	B2103	FLDBK	BD			10/17/2019 12:22	2	207	c	60	1	0	325246	SB1521
44-116	357009	5	B2103	FLDBK	BD			10/17/2019 12:23	2	227	c	60	1	0	325246	SB1521
44-116	357009	6	B2103	FLDBK	BD			10/17/2019 12:24	2	257	c	60	1	0	325246	SB1521
44-116	357009	7	B2103	QCV3	BS			10/17/2019 12:33	2	304	c	0	0	0	325246	SB1521
44-116	357009	8	B2103	QCV3	BD			10/17/2019 12:35	2	257	c	60	1	0	325246	SB1521
44-116	357009	9			BD	PSBKG		10/17/2019 12:39	2	187	c	60	1	0	325246	SB1521
44-116	357009	10			BD		PSCHK	10/17/2019 12:46	2	2586	c	60	1	1	325246	SB1521

WB

Reviewed By:

Survey # 2019-1201

Page 9 of 11  
10/24/19

## B2-010-103 [D] FSS

Probe Model	Serial Number	Sample Number	Survey Unit Grid	Location	D=Direct S=Scan	BKG	Source Check	Date / Time	Detector Setup	Logged Reading	Units (cpm)	Count Time	Logging Mode(min)	Alarm=1 No Alarm=0	Inst Serial Number	Tech Name
44-116	357439	0			BD	PRBKG	PRCHK	10/24/2019 14:20	1	161	c	60	1	0	325261	MJD
44-116	357439	1			BD			10/24/2019 14:23	1	2463	c	60	1	1	325261	MJD
44-116	357439	2	B2103	FLDBK	BD			10/24/2019 14:30	1	231	c	60	1	0	325261	MJD
44-116	357439	3	B2103	FLDBK	BD			10/24/2019 14:31	1	201	c	60	1	0	325261	MJD
44-116	357439	4	B2103	FLDBK	BD			10/24/2019 14:32	1	175	c	60	1	0	325261	MJD
44-116	357439	5	B2103	FLDBK	BD			10/24/2019 14:34	1	200	c	60	1	0	325261	MJD
44-116	357439	6	B2103	FLDBK	BD			10/24/2019 14:35	1	192	c	60	1	0	325261	MJD
44-116	357439	7	B2103	QCD20	BS			10/24/2019 14:43	1	326	c	0	0	0	325261	MJD
44-116	357439	8	B2103	QCD20	BD			10/24/2019 14:45	1	201	c	60	1	0	325261	MJD
44-116	357439	9			BD	PSBKG		10/24/2019 14:50	1	237	c	60	1	0	325261	MJD
44-116	357439	10			BD		PSCHK	10/24/2019 14:52	1	2417	c	60	1	1	325261	MJD

Sunny # 2019-1212  
PS 9 & 11

