

Exhibit 4

Cleanup Status Report and Data Package for

Survey Unit 4

Winchester Engineering and Analytical Center

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Survey Unit 4

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List of Abbreviations

Abbreviation	Description
AF	Area Factor
ALARA	As Low as Reasonable Achievable
bgs	below ground surface
CG	Cleanup Goal [ALARA]
CG _{EMC}	Cleanup Goal, Elevated Measurement Criteria
CG _w	Cleanup Goal, unit wide or average concentration
DCGL	Derived Concentration Guideline Value
DCGL _{EMC}	DCGL, Elevated Measurement Criteria
DCGL _w	DCGL, unit wide or average value criteria
EPA	Environmental Protection Agency
FS	Final Status
FSSP	Final Status Survey Plan
HOG	High Outdoor Gamma
MARSSIM	Multi-Agency Radiation survey and site Investigation Manual
MEI	Maximally Exposed Individual
NaI	Sodium Iodide
NRC	Nuclear Regulatory Commission
Ra-226	Radium 226
ROC	Radionuclide of Concern
SOF	Sum of Fraction
SU4	Survey Unit 1
Th-230	Thorium 230
Tot-U	Total Uranium
UCL	Upper Confidence Level
U-Nat	Nature Uranium
U-Tot	Total Uranium
U-Total	Total Uranium
WEAC	Winchester Engineering and Analytical Center

List of Symbols

δ	Unit Wide, Average Residual Activity
σ	Sigma, standard error
α	Critical Value for Wilcox Rank Sum Test
β	False negative error parameter
μ	micro (1/1000)

List of Units

cm	centimeter
cm ²	centimeters square
cpm	counts per minute
dpm	disintegrations per minute
k	kilo, 1000
m/second	meter per second
m ²	Meter square
mrem/hr	millirem per hour
pCi/g	pico curie per gram
uR/h	micro roentgen per hour
urem/hr	micro rem per hour

Survey Unit 4 Assessment Summary

The radiological assessment of SU4 indicates that the unit meets the 25 mrem/year DCGL_w remediation criterion. Additionally, the ALARA cleanup goal (CG_w) criterion of 10.4 mrem/yr has also been achieved. The average residual total effective dose for the unit is calculated at 1.34 mrem/year to the maximal exposure individual (MEI). No contamination was encountered in SU4 during remediation and is considered a non-impacted unit; the unit is surveyed for informational purposes only.

SU4 Summary Statistics

- Unit Average Net Sum of Fraction (SOF) is < Unity for the DCGL_w and is calculated as 0.05 resulting in a residual total effective dose estimate of 1.34 mrem/year.
- The Wilcoxon Rank Sum was not required since all samples were < the DCGL_w, thus the Null Hypothesis is rejected and its alternative, that the unit average concentration value is < DCGL_w, is accepted.
- All Systematic Samples are < Unity for the DCGL_w (Maximum Net SOF found at systematic sample location WEAC-FS-SU4-06 at 0.12).
- All Systematic Samples are < the CG_w ALARA values.
- All Judgmental samples are < the DCGL_w and the CG_w values.
- The one meter gamma dose rates are < the CG_w value across the entire unit except up against the brick building (higher natural background) where a few location range up to at a few small areas where the dose rate ranged up to 22 µR/h. Thus the ALARA objective for the unit is achieved.
- A retrospective assessment of the relative shift (Δ/σ) based on the systematic sample results demonstrates that sample quantity is adequate to assess results with adequate statistical power.

All collected and assessed evidence indicates that the Null Hypothesis (that the unit does not meet the DCGL_w criterion) should be rejected and its alternative (that the survey unit does meet criterion) is accepted. SU4 Systematic Sample Summary Data is provided in **Table 1**.

Table 1. SU4 Systematic Sample Summary Data

SU3	Average	1 σ	DCGL _w	Fraction		
Ra-226	1.14	0.16	12	0.095		
Th-230	1.82	1.47	37	0.049		
Total-U	2.92	0.60	560	0.005		
			SOF Sum:	0.15		
			SOF Ref. Area:	0.10		
			Net SOF:	0.05		
SOF in Residual Dose Terms:				1.34	mrem/year	

Survey Unit 4 Remediation

Survey Unit 4 (SU4), **Figure 1**, is designated as a Class III MARSSIM unit (non-impacted) surveyed for informational purposes. The Unit was surveyed using Class I protocols (100% gamma scan) since this was convenient to perform with little additional effort. No remediation was performed in the unit. Two test pits, one on the East and West sides of the main office building, were dug and sampled for informational purposes. The unit radionuclide activity averages vary slightly from the background reference unit averages however this may be more indicative of differing background soils than evidence of residual contamination. The unit appears to exhibit a relatively elevated Th-232 background but Th-228 levels closely correspond to the reference unit levels. Natural residual thorium, if a result of historical operations, would exhibit activity levels of these two radioisotopes in equilibrium (T-1/2 of Th-228 is 1.91 years) thus the difference may be indicative of a slight analysis bias for one isotope over the other.

The survey unit is assessed against derived concentration guideline levels (DCGL_w) and, as an ALARA objective, to an additional Cleanup Goal (CG_w). The DCGL_w is comparable to the NRC 25 mrem/yr effective annual dose limit - the CG_w is comparable to an effective annual dose limit of 10.4 mrem/yr.

The CG_w is based upon guidance provided by the Environmental Protection Agency (EPA) in Directive No. 9200.4-35P, *Remediation Goals for Radioactively Contaminated CERCLA Site Using the benchmark Dose Cleanup Criteria in 10 CFR 40, Appendix A, I, Criterion 6(6)*: EPA 2000. This directive allows a site to set the dose benchmark remediation goal based on Ra-226 + Ra-228 at 5 pCi/g (surface) and 15 pCi/g (subsurface) for the cleanup of byproduct material. This approach requires licensees to calculate the potential peak effective dose equivalent (excluding radon) to an individual at the site within 1,000 years from exposure to the residual levels allowed under the radium soil standard. The radionuclides of concern being addressed by the Criterion 6(6) rule are thorium, natural uranium, and radium.

As the CG_w is essentially equivalent to the State's remedial dose goal it may prove useful to WEAC to demonstrate performance against this objective when practical and thus it is adopted as an ALARA goal. However, survey design strategy and the ultimate determination of if remedial actions have been successful is assessed against the DCGL_w values. The radionuclide specific DCGL_w and CG_w values are provided in **Table 2**.

Table 2. WEAC DCGL_w Criteria and ALARA CG_w Values (pCi/g)

Radionuclide	DCGL _w	ALARA CG _w
Ra-226	12	5
Th-230	37	15.6
Total-Uranium	560	233
ALARA Dose Goal: Unit average dose rate < 16.0 µR/h with no small area > 25 µR/h.		

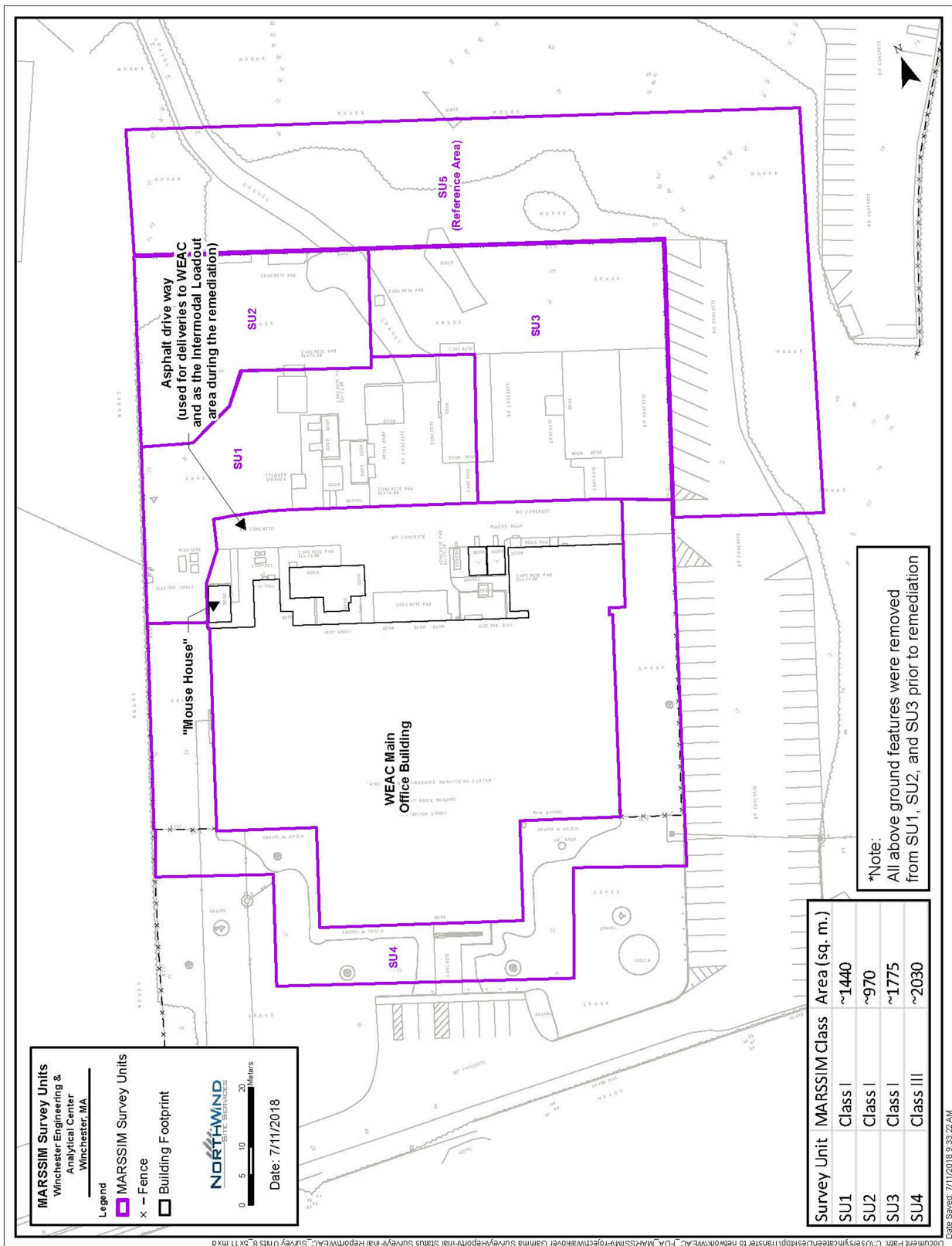


Figure 1. WEAC Survey Units

Survey Unit 4 Evaluation

SU4 is a 2030-m², MARSSIM Class III land area which surrounds three sides of the WEAC main office building. No residual contamination was encountered within the unit. Dose rates collected at 1-meter above ground surfaces exhibit normal anticipated variations in background due to the presence of the brick office building (brick will often exhibit higher background dose levels compared to natural soils) and due to geometric variations between the source (walls and wall-corners vs open ground) and the detector.

Trenching and Test Pits

No trenching was performed in SU4. Two test pits were dug to 4 feet bgs, one on the east side of the building and one on the west. A four point composite sample was collected from bottom of each test pit. The results of these samples are discussed later in this document.

Gamma Walkover Scanning

GPS-enabled gamma walkover scans were conducted across the survey unit as areas were readied for final assessment. These were performed following the Final Status Survey Plan (FSSP) prepared for the site and consisted of slowly moving the NaI detector across the surface at about 0.5 m/second at a height of 15 cm. Scan paths were approximately 0.5 to 1.0 meters apart. All Class I units were additionally cross walked to ensure full coverage. Gamma walkover survey results are provided in **Figure 2**.

ALARA Dose Rate Assessment

Criteria dose modeling demonstrates that the primary exposure pathway is direct radiation contributing over 95% to dose under the most restrictive exposure scenario (used to set the DCGL_w and CG_w values for each radionuclide). This includes Th-230 which reaches its maximum residual exposure at t=1000 years at which point Ra-226 has significantly ingrown which results in additional direct radiation exposure in 1000 years but is taken into account today.

At the WEAC site an ALARA residual dose rate goal is established at 5.2 uR/h as a unit average. This would equate to 10.4 mrem of residual exposure to an occupation outdoor worker spending 2000 hours in the survey unit. The Reference Area (SU5) average dose rate was measured at 10.8 ± 1.3 (1 σ) μ R/h. Thus the dose goal is $5.2 + 10.8$, or 16 μ R/h over the whole of the survey unit with no small area exceeding 25 μ R/h.

Dose rates were collected across the whole of SU4 at a height of 1 meter above the surface or from side walls of the main office building. These were collected using a NaI 2x2 inch detector which records penetrating radiation in cpm. The count rate data was converted into μ R/h using the manufacture's reported nominal exposure rate response in μ R/h per cpm; reported as 900 cpm/(μ R/h) (Reference Ludlum Instrumentation User's Manual for the Ludlum 44-10 detector). The result of this assessment is provided in **Figure 3**. For SU4, the majority of dose rates were < 16 μ R/h and a few small areas ranged up to < 22 μ R/h up near the brick walls of the main office building, thus the direct radiation dose CG_w is achieved.

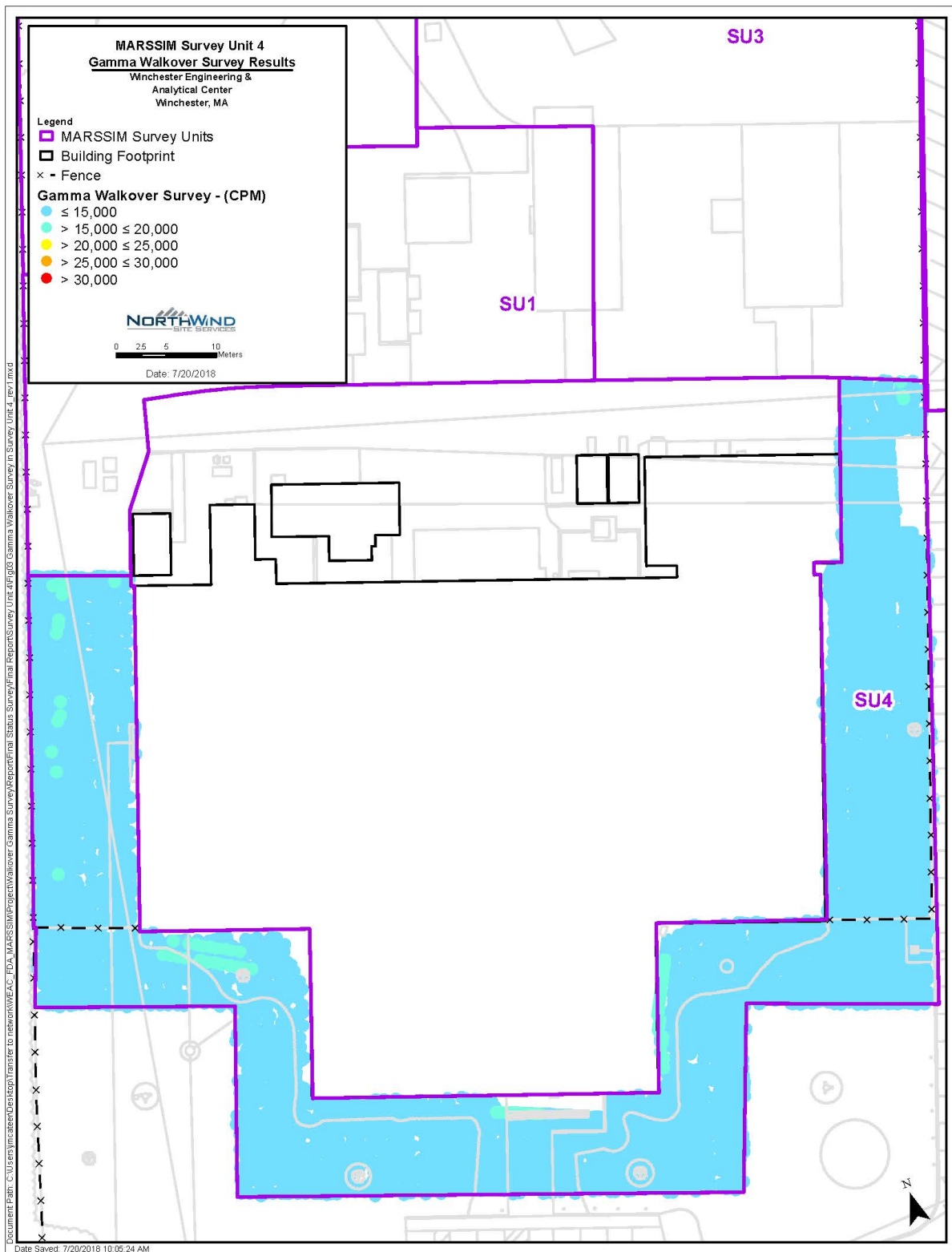


Figure 2. SU4, Gamma Detector (2x2 Inch, NaI) Walkover Survey Results

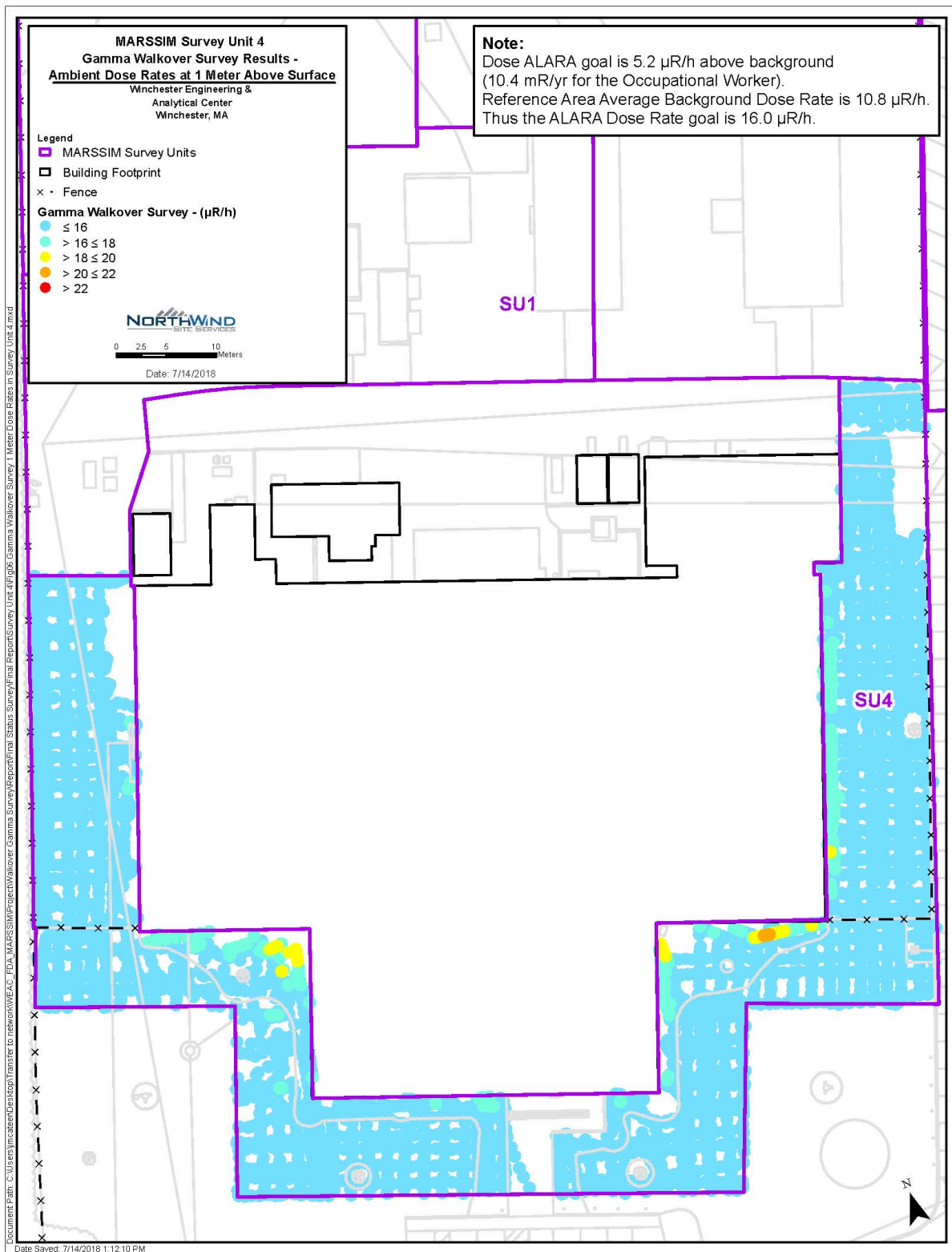


Figure 3. Dose Rate Survey Results for SU4

Reference Area

A Reference Area (the MARSSIM background area) was selected as the area north and east of the impacted area. The Historical Site Assessment (HSA) (WEAC 2017) determined that this area was unlikely to have been impacted by site radiological operations. The Reference Area was assessed as SU5 and found to be consistent with anticipated background conditions for the Boston, MA region; average dose rates were measured at 10.8 ± 1.3 (1 σ) $\mu\text{R/h}$. Soil sample results were within anticipated background concentration levels ($\sim 1 \pm 0.5$ pCi/g) for the naturally occurring radionuclides of concern (ROC). The Reference Area average SOF against the ROCs is 0.10 ± 0.02 (1 σ). The reference area differed somewhat from the SU4 in that the survey unit soil consisted of more backfill material which contained a significant fraction of large rocks (presumably relocated from an off-site backfill site).

The Reference Area is used to perform statistical tests and other comparisons to the survey unit under study when ROCs are found in natural background at significant levels in comparison to the site DCGL_w values. Reference Area (SU5) sample data is provided in **Table 3**.

Table 3. Reference Area (SU5) Systematic Sample Results

Sample ID	Ra-226	Th-228	Th-230	Th-232	U-234	U-235	U-238	Total-U	SOF	ALPHA	BETA
WEAC-FS-SU5-1-105	1.04	1.61	0.82	0.705	0.898	0.204	1.05	2.15	0.11	19.7	22.9
WEAC-FS-SU5-2-106	0.931	1.25	0.96	1.15	0.83	0.0584	0.965	1.85	0.11		
WEAC-FS-SU5-3-107	0.799	1.62	1.33	1.41	1.26	0.167	0.831	2.26	0.11		
WEAC-FS-SU5-4-108	0.772	1.97	0.434	1.34	0.90	0.2	1.8	2.90	0.08		
WEAC-FS-SU5-5-109	0.85	0.937	0.647	0.923	1.16	0.346	0.961	2.47	0.09		
WEAC-FS-SU5-6-110	0.678	1.5	0.738	0.447	0.807	0.0203	0.734	1.56	0.08		
WEAC-FS-SU5-7-111	0.768	1.3	0.928	0.821	1.04	0.0726	1.3	2.41	0.09		
WEAC-FS-SU5-8-113	0.796	1.42	0.964	0.946	1.02	0.0606	1.27	2.35	0.10	23.1	28.7
WEAC-FS-SU5-9-114	0.724	0.773	1.02	1.03	1.04	0.182	0.811	2.03	0.09	19.8	25.6
WEAC-FS-SU5-10-115	0.721	1.49	0.613	0.598	0.507	0.335	0.736	1.58	0.08		
WEAC-FS-SU5-11-116	0.926	1.71	1.02	0.992	1.41	0.0555	1.17	2.64	0.11		
WEAC-FS-SU5-12-117	0.618	0.797	0.318	0.653	0.416	0.0782	0.879	1.37	0.06		
WEAC-FS-SU5-13-118	1.22	1.14	0.895	0.998	0.935	0.24	0.664	1.84	0.13		
WEAC-FS-SU5-14-119	0.631	0.99	0.746	0.309	1.09	0.243	0.936	2.27	0.08	25.7	35.6
WEAC-FS-SU5-15-121	0.993	1.16	0.87	1.03	0.659	0.222	1.82	2.70	0.11		
WEAC-FS-SU5-16-122	1.02	1.33	0.788	0.546	0.856	0.0959	1.28	2.23	0.11	23.4	26.2
Reference Area Summary											
Count	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	6.00	6.00
Average	0.84	1.31	0.82	0.87	0.93	0.16	1.08	2.16	0.10	21.73	27.02
SD, n-1	0.17	0.34	0.24	0.31	0.26	0.10	0.35	0.43	0.02	2.74	4.72
1.96SD, n-1	0.33	0.66	0.48	0.61	0.51	0.20	0.69	0.85	0.03	5.36	9.25
Ave + 1.96SD, n-1	1.17	1.97	1.30	1.47	1.43	0.36	1.76	3.01	0.13	27.10	36.27
Initial Assessment: Reference Area											
Net Residual Average Activity (pCi/g):	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		SOF	Net SOF
DCGL _w (25 mrem/y):	12	N/A	37	N/A	N/A	N/A	N/A	560		0.00	0.00
Fraction (A/CG):	0.00		0.00					0.00		0.00	0.00
SOF (CGw):	0.00										
SOF (DCGL _w) in terms of Dose:	0.00	mrem/y, max dose over next 1000 years									

Systematic and Judgmental Soil Sampling

Systematic soil samples were collected, based upon a random start triangular grid, to provide a non-biased statistical sample set for the survey unit wide (DCGL_w) evaluation. One judgmental sample were collected the unit. Two test pits were dug in the east and west sides of the building. The test pits were dug to 4 feet bgs and the bottom was sampled as a 4-point composite sample.

All systematic and judgmental samples were sent off site for isotopic-uranium, isotopic-thorium, and Ra-226 analysis. Additionally, 3 of the systematic and the two test pit samples were selected for gross alpha/beta analysis. Systematic soil sample locations are provided in **Figure 5**. Judgmental soil sample locations are provided in **Figure 6**.

Systematic Soil Sample Results

Systematic samples were collected at 16 locations based upon a random start, triangular grid. A retrospective calculation of the relative shift (Δ/σ) results in a value of 9.80; since this is > the FSSP design parameter of 1.67 this confirms that the number of samples collected is adequate to demonstrate achievement of this data quality objective. This assessment is performed in **Figure 4**.

Post Sampling, Assessment of Sample Numbers DCGL _w								
	Ra-226	Th-228	Th-230	Th-232	U-234	U-235	U-238	U-Total
(1) $(SD/DCGL_w)^2$:	0.00017	0.00022						0.00221
(2) $SOF (SD/DCGL_w)^2$:	0.0026							
Sqrt of (2):	0.05	Sigma for the Weighted Sum						
DCGL _w (25 mrem/y):	12		37					560
Post Sampling, Assessment of Sample Numbers against the DCGL _w								
Delta = DCGL _w - LBGR	0.5	Set at 1/2 the DCGL _w per MARSSIM Guidance						
Sigma	0.05	Sigma for the data set, propagated error against unity						
Delta/Sigma	9.80	Relative Shift						
Decision Error	0.05	for alpha and beta errors						
Number of Sample	9	From MARSSIM Table 5.3, Values of N/2 for Use with the WRS Test						
Samples per Unit	16	Number of Samples Actually Collected per WEAC Survey Unit.						
Initial Assessment:	The number of samples collected exceeds that required based on the retrospective calculation, Delta/Sigma = 9.80 which is > 1.67.							

Figure 4. Retrospective Calculation of the Required Number of MARSSIM Samples

Systematic soil sample results are provided in **Table 4**.

Table 4. SU4 Systematic Survey Sample Data

Sample ID	Ra-226	Th-228	Th-230	Th-232	U-234	U-235	U-238	Total-U	ALPHA	BETA
WEAC-FS-SU4-1-124	0.941	1.2	1.51	1.63	0.896	0.0762	1.63	2.60	16.6	32.5
WEAC-FS-SU4-2-125	1.39	1.65	1.52	2.19	1.35	0.598	1.3	3.25		
WEAC-FS-SU4-3-126	1	1.08	1.5	1.39	1.38	0.379	1.72	3.48		
WEAC-FS-SU4-4-127	1.21	1.06	1.69	1.79	1.08	0.122	1.64	2.84		
WEAC-FS-SU4-5-128	1.06	0.855	2.39	2.2	1.51	-0.0364	0.894	2.37		
WEAC-FS-SU4-6-129	1.47	0.759	2.95	1.69	3.3	0.383	3.57	7.25		
WEAC-FS-SU4-7-130	1.27	0.913	2.61	1.94	1.15	0.193	1.38	2.72		
WEAC-FS-SU4-8-132	1.07	0.885	2.13	2.82	0.84	0.2	1.31	2.35	12.3	29
WEAC-FS-SU4-9-133	1.08	1.35	1.58	1.82	0.705	0.0353	1.2	1.94	20.8	25.9
WEAC-FS-SU4-10-134	1.22	1.22	2.44	1.47	1.36	0.196	1.62	3.18		
WEAC-FS-SU4-11-135	1.14	1.84	1.06	1.38	1.48	0.109	1.41	3.00		
WEAC-FS-SU4-12-136	0.945	0.997	1.82	1.82	1.3	0.315	1.03	2.65		
WEAC-FS-SU4-13-137	0.96	0.793	1.33	0.951	1.53	0.243	0.758	2.53		
WEAC-FS-SU4-14-138	1.28	0.827	1.91	1.72	1.22	0.173	0.504	1.90		
WEAC-FS-SU4-15-140	1.07	0.747	1.6	1.72	1.65	0.0257	0.639	2.31		
WEAC-FS-SU4-16-141	1.18	1.25	1.08	1.29	0.501	0.0813	1.73	2.31		
All results are in pCi/g										
Count	16	16	16	16	16	16	16	16	3	3
Average	1.14	1.09	1.82	1.74	1.33	0.19	1.40	2.92	16.57	29.13
Max	1.47	1.84	2.95	2.82	3.3	0.598	3.57	7.25	20.8	32.5
Min	0.941	0.747	1.06	0.95	0.50	-0.036	0.50	1.90	12.3	25.9

Judgmental Design Modifications

The gamma walkover survey did not produce evidence of residual contamination. A typical area exhibiting a slightly elevated gamma signature was selected as the judgmental sample location (WEAC-FS-SU4-142J-1), see **Table 5**.

The two test pit samples are identified as WEAC-SS-041 (East of building) and WEAC-SS-042 (West of building), See Table 6. The relatively high Th-230 result at the two test pit locations is curious, in the absence of similar uranium results one could conclude this is not natural background material. However, if this material was associated with historical site activities (e.g., if tailings were used as fill material) one would expect much higher Th-230 results along with high Ra-226 results. Finding high background Th-230 by itself may also indicate a slight lab bias or indicate some unidentified error in the thorium analysis.

All judgmental sample locations are provided in Figure 6.

Table 5. Judgmental Samples from SU4

Sample ID	Ra-226	Th-228	Th-230	Th-232	U-234	U-235	U-238	Total-U	ALPHA	BETA
WEAC-SS-041	0.724	0.911	3.00	0.896	0.981	0.202	0.551	1.73	23.1	27
WEAC-SS-042	0.774	1.22	4.00	1.77	1.04	0.162	1.56	2.76	27.7	29.4
WEAC-FS-SU4-142J-1	1.06	0.728	2.52	0.612	1.77	0.368	1.9	4.04		
Sample Description										
SS-041, 4-pt composite sample from the east side test pit.										
SS-042, 4-pt composite sample from the west test pit.										
142J-1, resample of 142J, judgmental FS sample from SU4.										

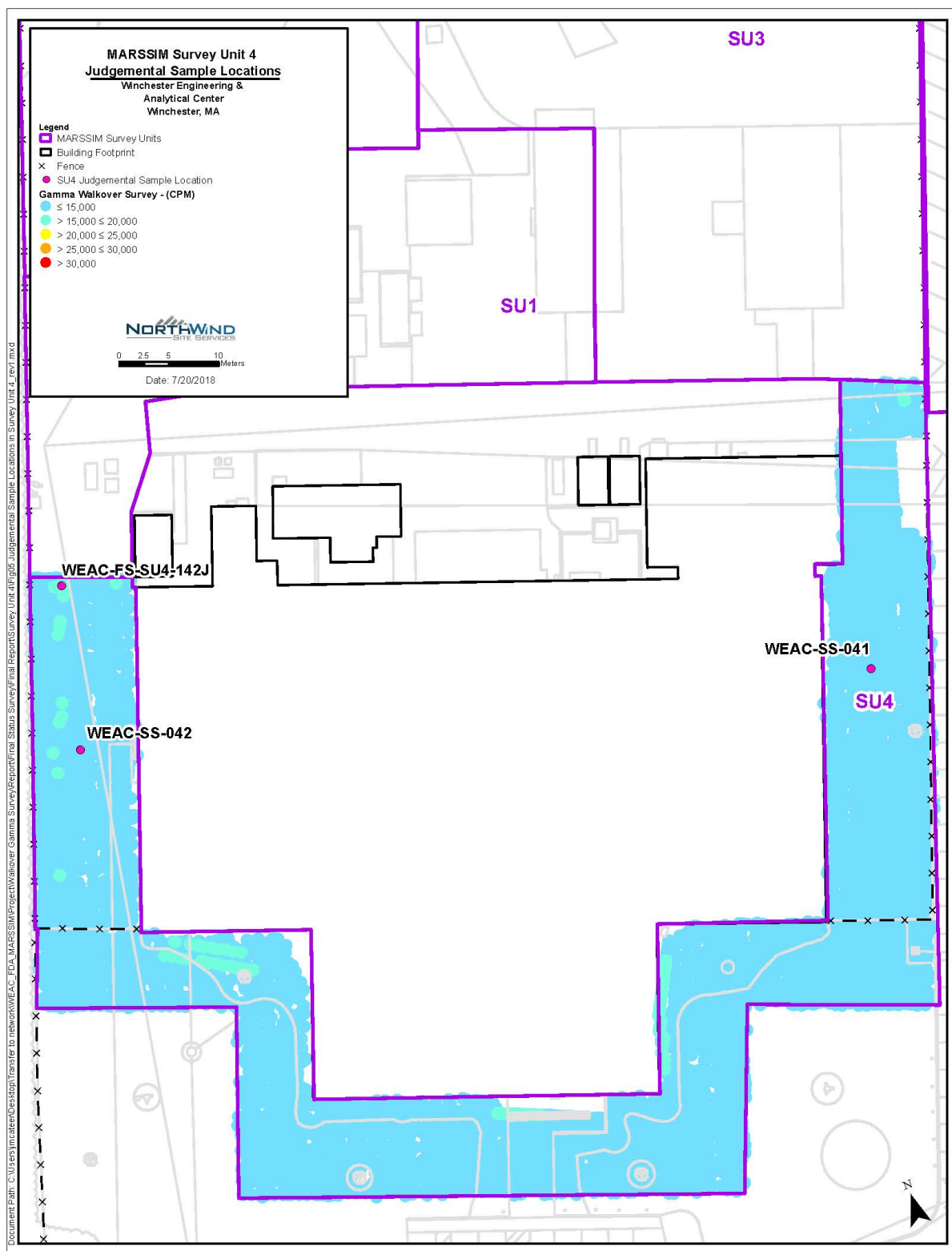


Figure 6. SU4 Judgmental Sample Locations

Assessment Results

The Reference Area average SOF (for the ROCs) in regards to the DCGL_w is 0.10, this value is used to assess “net SOF” results for SU4. SU4 Th-232 and Th-228 results are compared to the Reference Area average 95% UCL to assess if these radionuclides are consistent with background; to be inconsistent with background both Th-232 and Th-228 would need exceed these values.

In SU4 all systematic sample results were below the DCGL_w and the ALARA CG_w. Systematic Sample SU4-06 exhibited the greatest net SOF at 0.46. All sample results are provided in **Table 6**. The average net SOF for the SU4 was 0.05 (e.g., SU4 average SOF [0.15], less the Reference Area SOF [0.10], is 0.05). This results in a derived residual dose of 1.34 mrem/yr for a person working within the survey unit. Since no sample exceeded unity for the SOF, the WRS test is not performed.

Table 6. SU4 Systematic Sample Results (Activity in pCi/g) and CG_w Assessment

Sample ID	Ra-226	Th-228	Th-230	Th-232	U-234	U-235	U-238	Total-U	SOF	Net SOF
WEAC-FS-SU4-1-124	0.941	1.2	1.51	<i>1.63</i>	0.896	0.0762	1.63	2.60	0.12	0.03
WEAC-FS-SU4-2-125	1.39	1.65	1.52	<i>2.19</i>	1.35	0.598	1.3	3.25	0.16	0.07
WEAC-FS-SU4-3-126	1	1.08	1.5	<i>1.39</i>	1.38	0.379	1.72	3.48	0.13	0.03
WEAC-FS-SU4-4-127	1.21	1.06	1.69	<i>1.79</i>	1.08	0.122	1.64	2.84	0.15	0.06
WEAC-FS-SU4-5-128	1.06	0.855	2.39	<i>2.2</i>	1.51	-0.0364	0.894	2.37	0.16	0.06
WEAC-FS-SU4-6-129	1.47	0.759	2.95	<i>1.69</i>	3.3	0.383	3.57	7.25	0.22	0.12
WEAC-FS-SU4-7-130	1.27	0.913	2.61	<i>1.94</i>	1.15	0.193	1.38	2.72	0.18	0.09
WEAC-FS-SU4-8-132	1.07	0.885	2.13	<i>2.82</i>	0.84	0.2	1.31	2.35	0.15	0.05
WEAC-FS-SU4-9-133	1.08	1.35	1.58	<i>1.82</i>	0.705	0.0353	1.2	1.94	0.14	0.04
WEAC-FS-SU4-10-134	1.22	1.22	2.44	<i>1.47</i>	1.36	0.196	1.62	3.18	0.17	0.08
WEAC-FS-SU4-11-135	1.14	1.84	1.06	<i>1.38</i>	1.48	0.109	1.41	3.00	0.13	0.03
WEAC-FS-SU4-12-136	0.945	0.997	1.82	<i>1.82</i>	1.3	0.315	1.03	2.65	0.13	0.04
WEAC-FS-SU4-13-137	0.96	0.793	1.33	<i>0.951</i>	1.53	0.243	0.758	2.53	0.12	0.02
WEAC-FS-SU4-14-138	1.28	0.827	1.91	<i>1.72</i>	1.22	0.173	0.504	1.90	0.16	0.07
WEAC-FS-SU4-15-140	1.07	0.747	1.6	<i>1.72</i>	1.65	0.0257	0.639	2.31	0.14	0.04
WEAC-FS-SU4-16-141	1.18	1.25	1.08	<i>1.29</i>	0.501	0.0813	1.73	2.31	0.13	0.04
Radionuclide Results are in pCi/g, SOF is unitless									SOF	Net SOF
Average	1.14	1.09	1.82	1.74	1.33	0.19	1.40	2.92	0.15	0.05
Standard Deviation	0.16	0.32	0.55	0.43	0.62	0.16	0.70	1.24	0.03	0.03
Max	1.47	1.84	2.95	2.82	3.3	0.598	3.57	7.25	0.22	0.12
Any Samples > DCGL _w :	No		No					No		
Samples > CG _w ?:	No		No					No		
Any Sample > Unity?:									No	No
Initial Assessment: Since no samples exceeded the DCGL _w the WRS test is not required.									SOF _{av} -SOF _b	Net SOF
SU3 Average Net Activity (δ) in pCi/g:	0.30	-0.22	1.00	0.87	0.40	0.03	0.32	0.75	0.05	0.05
DCGL _w (25 mrem/y):	12	N/A	37	N/A	N/A	N/A	N/A	560	1	1
Fraction (δ/DCGL _w):	0.02		0.03					0.00	0.05	0.05
SOF (DCGL _w):	0.05									
SOF (DCGL _w) in terms of Dose:	1.34	mrem/y, max dose over next 1000 years								

No sample exceeded the Th-232/Th-228 combined background screening values for both Th-232 and Th-228 (results in red *italics*).

Elevated Measurement Assessment

No systematic or judgmental sample exceeded the DCGL_w.

Surfaces within SU4

There are no surfaces within SU4