

Attachment 1

Final Status Survey Final Report Volume 2, Chapter 2

**Data Summary Report for Combined Reuse Soil Stockpile 1-2, Revision 1
(HDP-RPT-FSS-106)**

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Westinghouse Electric Company LLC, Hematite Decommissioning Project

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Hematite Decommissioning Project

Final Status Survey Final Report Volume 2, Chapter 2

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Stockpile 1-2

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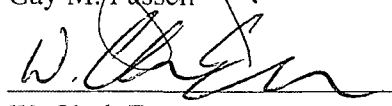
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LIST OF ACRONYMS AND SYMBOLS

Bq	becquerel
cyd	cubic yards
CSM	Conceptual Site Model
DCGL	Derived Concentration Guideline Level
DCGL _w	DCGL ("W" suffix denotes "Wilcoxon")
DP	Hematite Decommissioning Plan
DQA	Data Quality Assessment
FSS	Final Status Survey
FSSFR	Final Status Survey Final Report
g	gram
GWS	Gamma Walkover Survey
HDP	Hematite Decommissioning Project
HP	Health Physics
kg	kilogram
MDC	Minimum Detectable Concentration
MIL	Modified Investigation Level
NaI	Sodium Iodide
NRC	U.S. Nuclear Regulatory Commission
ORAU	Oak Ridge Associated Universities
pCi/g	picocurie(s) per gram
QC	Quality Control
Ra	Radium
RML	Reuse Material Screening Action Level
S3	ISO-Pacific Nuclear Assay Systems S3 Soil Sorting System
SOF	Sum of Fractions
Tc	Technetium
Th	Thorium
Westinghouse	Westinghouse Electric Company LLC
U	Uranium

1.0 INTRODUCTION

The purpose of this document, Final Status Survey Final Report (FSSFR) Volume 2, Chapter 2, *Data Summary Report for Combined Reuse Stockpile 1-2*, is to provide the data summary for Combined Reuse Stockpile 1-2 to demonstrate that it met the criteria to be used as backfill material, and to describe the disposition of the stockpile within the respective land survey area in which it was placed.

2.0 REPORT BACKGROUND

As a result of NRC feedback regarding the submittal of the FSSFR, Westinghouse and the NRC agreed that Westinghouse would develop an outline presenting the format and content of FSS documents required for NRC review. Westinghouse provided the outline to the NRC for discussion during the August 19, 2015, publicly noticed teleconference and the format was agreed upon {ML15238B032}. This report follows the agreed upon format.

FSSFR Volume 2, Chapter 1, Revision 1, *Reuse Soil and Off-site Borrow Material Overview* {ML16152A752} provides the information common to reuse soil stockpiles. This report, FSSFR Volume 2, Chapter 2, builds upon the general information provided in FSSFR Volume 2, Chapter 1, Revision 1.

3.0 STOCKPILE DESCRIPTION

The initial generation of Reuse Stockpile 1 began on January 30, 2012, with the processing of two truckloads of off-site borrow soil. During facility licensed operations Westinghouse Electric Company LLC (Westinghouse) had a commitment with the NRC to fill in depressions in the overburden caused by settling of the buried waste in the Burial Pit Area. To accomplish this in a timely manner the site maintained a stockpile of off-site borrow material to use on an as needed basis to fill the depressions. With the approval by the NRC to commence remediation of the site it was no longer necessary to fill depressions in the Burial Pit. As a matter of preparation for the start of remediation and to demonstrate that the stockpile had not been radiologically impacted while on-site it was determined that the appropriate disposition of the material would be as potential reuse soil. As the origin of this soil was from an off-site source it was not chemically impacted by site operations and therefore was placed in the Reuse Soil Laydown Area located directly to the east of site. Generation of Reuse Stockpile 1 recommenced on May 14, 2012, and ended with closure of the stockpile on July 30, 2012.

The HDP Radiation Safety Officer (RSO) established the initial (beginning January 26, 2012) Reuse Material Screening Action Level (RML) for gamma walkover surveys of potential reuse soil at 2,000 ncpm as indicated by a Sodium Iodide (NaI) 2" x 2" detector. Based upon a review of the reuse soil process during the onset of remediation the RSO conducted a comparison of the RML to the analytical sample results of the reuse soil generated to that point. It was determined that it was appropriate to increase the RML to 4,000 ncpm. This would allow for the increased generation of reuse soil volume while minimizing the volume of clean soil sent for disposal. The increase of the RML was

implemented on April 10, 2012. The establishment and use of the RML is discussed in further detail in section 2.2.

Generation of Reuse Stockpile 2 commenced on March 20, 2012, and was generated concurrent with Reuse Stockpile 1. Soil in Reuse Stockpile 2 originated primarily from the top four feet of overburden soil in the Burial Pit Area. As this soil was yet to be determined to meet the chemical remediation requirements, it was prohibited from being located in the Reuse Soil Laydown Area until such time that chemical sampling and analysis was complete. To preclude stoppage of work excavating the overburden soil, Reuse Stockpile 2 was located in a laydown area established on the west side of the facility. Reuse Stockpile 2 was closed to the addition of soil on May 10, 2012. Subsequent to closure of Reuse Stockpile 2, upon completion of chemical sampling and analysis, the stockpile was relocated to the Reuse Soil Laydown Area.

In June 2013, there was a discovery of a fuel pellet fragment in a Barns Area survey unit LSA 05-02 while undergoing a confirmatory survey by Oak Ridge Associated Universities (ORAU) for the NRC. The event was entered into the Westinghouse corrective action system and prompted an evaluation of the effectiveness of the implementation of the gamma walk over survey in regards to identification of a discrete item (pellet fragment). The gamma walkover survey method as prescribed in site procedures at that time was that the surveys were performed with the detector probe being held at 3-inches from the surface. The evaluation concluded that the discrete item would be identified during the survey if the probe was held closer to the surface. The site modified its site procedures to state that the Health Physics (HP) Technician would hold the probe as close to the surface as possible when performing gamma walkover surveys.

Although it was determined that the dose consequence of a missed discrete item (pellet fragment) in a reuse soil stockpile that was eventually returned to a survey unit excavation was minimal, the same conclusion could not be reached for multiple missed discrete items. It is for this reason that one of the recommended corrective actions from the evaluation was to re-evaluate all of the soils that comprised the seven reuse stockpiles. To accomplish the re-evaluation, HDP engaged the services of an ISO-Pacific Nuclear Assay Systems S3 ("S3") Soil Sorting System. This operation commenced in November 2013, and continued through March 2014.

As a result of processing these soils through the S3, there was a consolidation of the stockpiles. The following Reuse Stockpiles were combined; Reuse Stockpiles 1 and 2; Reuse Stockpiles 4 and 7; and Reuse Stockpiles 5 and 6. Reuse Stockpile 3 was not combined with another stockpile. Due to contractual time constraints with the S3 soil sorting system not all of the soil in each of the reuse stockpiles was able to be evaluated by S3 processing. The soils not evaluated (called "leftovers" or "overs" soil) by the S3 were combined to form Reuse Stockpile 9.

4.0 REUSE SOIL CRITERIA

FSSFR Volume 2, Chapter 1, Section 3.0 provides a detailed discussion of the criteria applicable to all reuse soil at HDP. The section includes discussion specific to Radionuclides of Concern; Derived Concentration Guideline Levels (DCGL); Modified Investigation Level (MIL); Weighted Average Calculation; and Data Presentation.

Table 4-1 presents the two DCGL_w's by Conceptual Site Model (i.e., Uniform or Three-Layer). Table 4-2 presents the Tc-99 MIL's applicable to reuse soils at HDP.

Table 4-1
Adjusted Soil DCGL_w's by CSM^a

Radionuclide	Three Layer Approach DCGL _w Values (pCi/g) ^b			Uniform Stratum (pCi/g)
	Surface Stratum	Root Stratum	Excavation Scenario	
Radium-226+C ^d	5.0	2.1	5.4	1.9
Technetium-99	151.0	30.1	74.0	25.1
Thorium-232+C ^d	4.7	2.0	5.2	2.0
Uranium-234	508.5	235.6	872.4	195.4
Uranium-235+D ^c	102.3	64.1	208.1	51.6
Uranium-238+D ^c	297.6	183.3	551.1	168.8

^a Table adapted from HDP-PR-FSS-701, Final Status Survey Plan Development, Appendix A.

^b The reported DCGL_w's are the activities for the parent radionuclide and were calculated to account for the dose contribution from insignificant radionuclides.

^c +D indicates the DCGL_w includes short-lived (half-life ≤ 6 mo.) decay products.

^d +C indicates the DCGL_w includes all radionuclides in the associated decay chain.

Table 4-2
HDP Tc-99 MIL by CSM

CSM	Tc-99 DCGL _w (pCi/g)	4 aliquot Tc-99 MIL (pCi/g)
Uniform	25.1	6.3
Surface	151.0	37.8
Root	30.1	7.5
Excavation	74.0	18.5

5.0 SURVEY METHODOLOGY

The survey methodology utilized to demonstrate the acceptability of Combined Reuse Stockpile 1-2 was Approach 1, as described in FSSFR Volume 2, Chapter 1, Section 4.1, *Survey Methodology for Reuse Stockpiles 1 through 4 and Reuse Stockpile 7*.

In summary, this approach provided for: (1) a 100% GWS of the surface prior to excavation at 3 inches above the surface, including marking for removal sections which exceeded the GWS action level; (2) bulk analysis of the entire volume of soil intended for reuse as backfill by the box counter; and (3) laboratory analysis of composite soil samples collected at random as the stockpile was accumulated.

In addition to demonstration of compliance with the release criteria by the survey methodology described in DP Chapter 14 as presented above, the reuse soil that comprises Combined Reuse Stockpile 1- 2 was also processed through the S3 soil sorter as described in FSSFR Volume 2, Chapter 1.

5.1 Gamma Walk Over Scan MDC

Background levels were less than 10,000 counts per minute (cpm), thus the scan minimal detection concentration (MDC) calculation for total uranium given in HDP-PR-FSS-701, Final Status Survey Plan Development, (Section 8), was applied:

$$\text{Scan MDC (total uranium)} = \frac{1}{\left(\left(\frac{f_{U-234}}{7383 \text{ pCi/g}} \right) + \left(\frac{f_{U-235}}{4.9 \text{ pCi/g}} \right) + \left(\frac{f_{U-238}}{62.8 \text{ pCi/g}} \right) \right)} \quad \text{Equation 5-1}$$

Standard scan MDCs for Radium-226 and Thorium-232 using a 2" x 2" NaI detector are found in Table 6.4 of NUREG-1507 and are shown in the Table 5-1. Assuming 4% enrichment, and a 10,000 cpm background, scan MDCs for a 2" x 2" detector are:

Table 5-1
Scan MDCs for 2" x 2" NaI Detector, 10,000 cpm Background, 4% Enrichment

	Total Uranium (4% U-235)	Radium-226	Thorium-232
Scan MDC (pCi/g)	85.9	2.8	1.8

5.2 ISO-Pacific S3 Sorter Scan MDC

As described in FSSFR Volume 2 Chapter 1, the MDC applicable to Stockpiles 1 through 7 is detailed in HDP-TBD-HP-406, *Preliminary Evaluation and Test Plan for ISO 3 for Assaying and Segregating Soil at HDP that is Potentially Contaminated with Uranium*, with a scan MDC of 46% of the Uniform DCGL.

6.0 SURVEY IMPLEMENTATION

Prior to excavation, areas to be excavated were surveyed by GWS in accordance with HDP PR-HP-601. Areas of potential reuse soil as indicated by the GWS as areas of soil less than the RML were identified. Areas that were to be segregated from the potential reuse soil were marked by the use of green paint to indicate that area was not potential reuse soil. Also, any area less than the RML but exhibiting visual indication of debris was also marked with green paint and no longer considered potential reuse soil.

The soil was then removed to the intended cut depth and loaded into a truck to be assessed with the gamma spectroscopy box counter system that achieves an MDC that is less than the Uniform DCGL. Any truckload that exceeded the Uniform DCGL was rejected, and the truckload was sent to the Waste Holding Area (WHA) for waste processing and disposal.

Soil that indicated less than the Uniform DCGL was dumped and spread out at the material lay down area and a GWS was performed on the surface of the pile. The GWS was conducted to identify locations of elevated count rate that exceed the RML and that required removal and disposition as waste. The gamma scan also served to demonstrate that the radioactivity in the truckload of spread-out soil was uniformly distributed.

Following the scan survey, a composite sample, consisting of four aliquots collected at random, was obtained and submitted for laboratory analysis. The soil was then pushed into a pile and kept separate from the larger stockpile until the results of the laboratory analysis was received and reviewed. Dependent on the results of the laboratory analysis of the composite sample, if acceptable, the soil pile was then consolidated into the appropriate stockpile. If not acceptable the soil pile was diverted to waste disposal.

Subsequently, the stockpiles were then processed through the S3 Soil Sorter. Failed soil was transferred to the WHA for disposal. Soil that successfully passed through the S3 Soil Sorter was stockpiled for reuse as Combined Reuse Stockpile 1-2.

7.0 SURVEY AND SAMPLING RESULTS

The total data set for Combined Reuse Stockpile 1-2 is substantial since it includes the subsets of information collected during formation of the two original reuse stockpiles (Reuse Stockpile 1 and Reuse Stockpile 2), which were eventually merged during the S3 soil sorting process into "Combined Reuse Stockpile 1-2."

7.1 Stockpile 1 Survey Results

Each truck load of dumped and spread-out soil was visually inspected for debris and gamma scanned for exceedance of the RML. Any debris identified was removed to the waste stream as well as any area of soil that exceeded the RML. Areas where soil was removed were resurveyed to verify the area was less than the RML.

7.2 Stockpile 1 Data Subset

In addition to performing the GWS of the dumped and spread-out soil for each truck load, composite sampling of each truck load soil pile was performed which consisted of four aliquots collected at random locations. The original Reuse Stockpile 1 data set consists of 275 composite samples; one composite sample for each individual truckload contribution to the total Reuse Stockpile 1 volume. Correspondingly, there are 275 box counter measurements (i.e., one box counter assay for each original Reuse Stockpile 1 truckload).

Table 7-1 includes the summary results for all samples obtained from original Reuse Stockpile 1, and the associated SOF when compared to the Uniform DCGL_w. The arithmetic average concentration resulted in a SOF for original Reuse Stockpile 1 of 0.10. The weighted average SOF (considering the contribution of each individual load of soil) was also 0.10, indicating a fairly consistent weight for each container (truckload) of soil which contributed to original Reuse Stockpile 1.

Table 7-1
Reuse Stockpile 1 Sample Data and Calculated SOF Values

Statistic	Ra-226 DCGL = 1.9 BKG = 0.9 pCi/g	Tc-99 DCGL = 25.1 pCi/g	Th-232 DCGL = 2.0 BKG = 1.0 pCi/g	U-234 DCGL=195.4 pCi/g	U-235 DCGL=51.6 pCi/g	U-238 DCGL=168.8 pCi/g	Enrichment Wt %	Sample SOF (Uniform DCGL)
Average	0.83	0.23	1.04	5.53	0.30	1.53	2.8	0.10
Minimum	0.55	-0.33	0.55	0.48	0.02	0.77	0.4	0.02
Maximum	1.35	15.90	1.36	182.21	8.38	2.87	31.2	1.19

Notes:

1. Ra-226 and Th-232 background subtracted prior to calculating SOF value. Negative SOF components set to zero in SOF calculation.
2. Average SOF for data set calculated using average radionuclide concentrations.

A review of the sample data indicated that one (1) of the 275 composite samples exceeded the Tc-99 Uniform MIL and Tc-99 Root Stratum MIL of 6.3 and 7.5 pCi/g (3025-RU-120716-02-07 at 15.9 pCi/g), and one (1) of the samples exceeded the Tc-99 Uniform MIL only (2716-RU-120521-02-10 at 6.59 pCi/g). All 275 composite samples were less than the Tc-99 MIL for the Surface and Excavation Stratums.

There was one instance where a sample resulted in a SOF value greater than 1 when compared to the Uniform DCGL_w. On June 4, 2012, sample number 2795-RU-120604-02-04 indicated an unweighted SOF value of 1.186 and a weighted SOF value of 1.238. As a result of exceeding the SOF for the Uniform DCGL_w the sample results were then compared to the Surface, Root and Excavation DCGL values and the unity rule applied. The resulting SOF values were 0.47, 0.99, and 0.28, respectively.

Table 7-2 presents the SOF results from sample 2795-RU-120604-02-04 as described above.

Table 7-2
**Reuse Stockpile 1 Sample Data – Sample 2795-RU-120604-02-04 Compared to the Surface,
Root and Excavation DCGL Values**

Surface Stratum	Ra-226 DCGL = 5.0 BKG = 0.9 pCi/g	Tc-99 DCGL = 151.0 pCi/g	Th-232 DCGL = 4.7 BKG = 1.0 pCi/g	U-234 DCGL = 508.5 pCi/g Inferred Result	U-235 DCGL = 102.3 pCi/g	U-238 DCGL = 297.6 pCi/g	Sample SOF (Surface DCGL)
2795-RU-120604-02-04	1.01 ± 0.14	< 0.41 ± 0.31	0.95 ± 0.14	182.21	8.38 ± 0.93	2.87 ± 0.82	0.47
Root Stratum	Ra-226 DCGL = 2.1 BKG = 0.9 pCi/g	Tc-99 DCGL = 30.1 pCi/g	Th-232 DCGL = 2.0 BKG = 1.0 pCi/g	U-234 DCGL = 235.6 pCi/g Inferred Result	U-235 DCGL = 64.1 pCi/g	U-238 DCGL = 183.3 pCi/g	Sample SOF (Root DCGL)
2795-RU-120604-02-04	1.01 ± 0.14	< 0.41 ± 0.31	0.95 ± 0.14	182.21	8.38 ± 0.93	2.87 ± 0.82	0.99
Deep Stratum	Ra-226 DCGL = 5.4 BKG = 0.9 pCi/g	Tc-99 DCGL = 74.0 pCi/g	Th-232 DCGL = 5.2 BKG = 1.0 pCi/g	U-234 DCGL = 872.4 pCi/g Inferred Result	U-235 DCGL = 208.1 pCi/g	U-238 DCGL = 551.1 pCi/g	Sample SOF (Excavation DCGL)
2795-RU-120604-02-04	1.01 ± 0.14	< 0.41 ± 0.31	0.95 ± 0.14	182.21	8.38 ± 0.93	2.87 ± 0.82	0.28

Notes:

1. Ra-226 and Th-232 background subtracted prior to calculating SOF value. Negative SOF components set to zero in SOF calculation.
2. U-234 values are inferred from the U-235/U-238 ratio; uncertainty and MDC values not applicable

It should be noted that the next highest SOF (Uniform DCGL) composite container sample was 0.76, and considering the average SOF of original Reuse Stockpile 1 it suggests the sole SOF exceedance was an anomalous outlier. It is also a reasonable assumption that the soil associated with this elevated material was removed to the waste stream during the S3 sorting process as part of the approximately 0.8% fraction of the total stockpile mass that which was diverted due to being above the S3 diversion criteria. Nevertheless, the data from the aforementioned three samples dictates the placement of the reuse soil within the Surface or Excavation Stratum.

Attachment 1 to this report presents the complete analytical data set used to derive the original Reuse Stockpile 1 summary statistics presented in Table 7-1 above. Also, Attachment 3 to this report presents the box counter results in spreadsheet format for both original Reuse Stockpile 1 and original Reuse Stockpile 2.

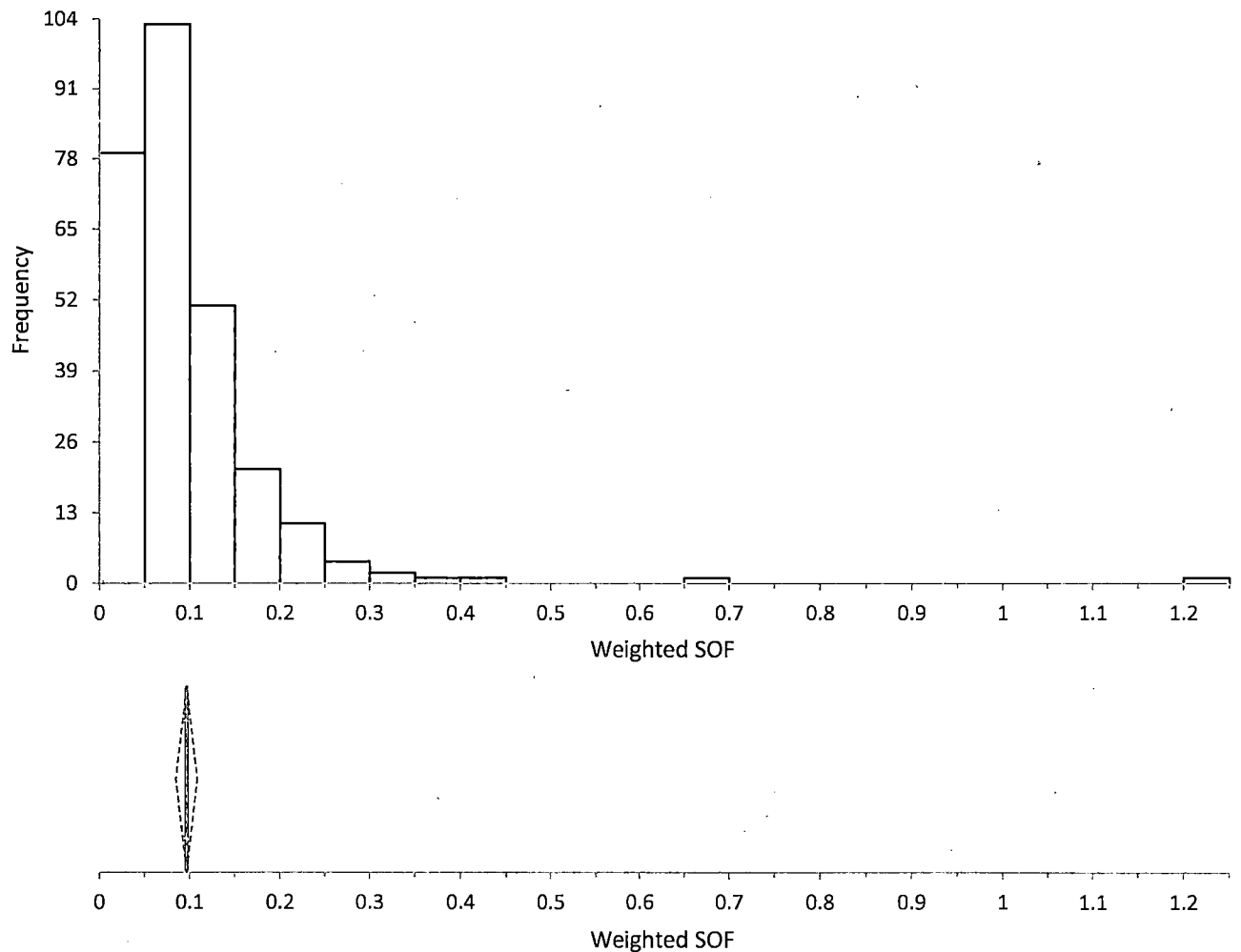
Figure 7-1 presents a graphical statistical summary of original Reuse Stockpile 1. The top graph is a histogram and line plot of the SOF for the data population comprising original Reuse Stockpile 1.

The middle graph presents the mean SOF (0.10 as indicated by the blue vertical line) of the sample population and the 95% confidence interval of the mean SOF represented by the blue diamond which is 0.085 to 0.109. The 96% confidence interval based on the median of the sample results is 0.066 to 0.082.

The bottom two charts present the various statistical metrics of the original Reuse Stockpile 1 SOF data set, including the mean, median, standard deviation, minimum,

maximum, confidence intervals, etc. Analysis using the ProUCL software indicates the data follows a lognormal distribution at a 5% significance level, with a suggested 95% H-UCL of 0.102 – see Appendix A of this report.

Figure 7-1
Statistical Summary for Reuse Stockpile 1 SOF (Uniform DCGL)



N | 275

	Mean	95% CI		Mean SE	SD	Variance	Skewness	Kurtosis
Weighted SOF	0.097	0.085	to 0.109	0.0061	0.100	0.010	6.5	64.69
	Minimum	1st quartile	Median	95.99% CI		3rd quartile	Maximum	IQR
Weighted SOF	0.01	0.045	0.072	0.066	to 0.082	0.117	1.24	0.071

7.3 Stockpile 2 Survey Results

Each truck load of dumped and spread-out soil was visually inspected for debris. Any debris identified was removed to the waste stream.

During the gamma scan of the dumped truckloads of potential reuse soil for original Reuse Stockpile 2 there were three (3) occurrences where the RML was exceeded. As discussed in FSSFR Volume 2, Chapter 1, Section 2.2.1, *History of the Determination and Use of the Reuse Material Screening Action Level*, during the generation of original Reuse Stockpiles 1 and 2 the RSO was performing assessment of the radiological survey data to determine if a change in the RML was appropriate. To aid in the assessment, the RSO directed that three biased samples for each of the three occurrence of the RML exceedance for original Reuse Stockpile 2 be collected and analyzed onsite at HDP. All of the biased sample analysis results were less than the Uniform Stratum DCGL_w. Nevertheless, a small amount of one container-load (< 20 cyd) was directed to the waste stream as a matter of processing efficiency (lengthy time to process), the other soil remained as part of original Reuse Stockpile 2.

7.4 Stockpile 2 Data Subset

In addition to the gamma scan, the original Reuse Stockpile 2 data set consists of 288 separate composite samples which consisted of four aliquots collected at random locations. Correspondingly, there are 288 box counter measurements (i.e., one box counter assay for each original Reuse Stockpile truckload).

Table 7-3 includes the summary results of all samples obtained from original Reuse Stockpile 2, and the associated SOF when compared to the Uniform DCGL_w. The arithmetic average concentration resulted in a SOF for original Reuse Stockpile 2 of 0.10. The weighted average SOF (considering the contribution of each individual load of soil) is 0.11.

Table 7-3
Reuse Stockpile 2 Sample Data and Calculated SOF Values

Statistic	Ra-226 DCGL = 1.9 BKG = 0.9 pCi/g	Tc-99 DCGL = 25.1 pCi/g	Th-232 DCGL = 2.0 BKG = 1.0 pCi/g	U-234 DCGL=195.4 pCi/g	U-235 DCGL=51.6 pCi/g	U-238 DCGL=168.8 pCi/g	Sample SOF (Uniform DCGL)
Average	0.79	0.56	0.96	6.06	0.33	1.66	0.10
Minimum	0.38	-0.36	0.00	1.21	0.06	0.73	0.02
Maximum	1.2	8.9	1.3	16.5	0.9	10.4	0.44

Notes:

1. Ra-226 and Th-232 background subtracted prior to calculating SOF value. Negative SOF components set to zero in SOF calculation.
2. Average SOF for data set calculated using average radionuclide concentrations.

A review of the sample data indicated that one (1) of the 288 composite samples exceeded the Tc-99 Uniform MIL and Tc-99 Root Stratum MIL of 6.3 and 7.5 pCi/g (2467-RU-120411-01-02 at 8.9 pCi/g), and one (1) of the samples exceeded the Tc-99 Uniform MIL only (2458-RU-120410-01-04 at 6.11 pCi/g). All 288 composite samples were less than the MIL for the Surface and Excavation stratum.

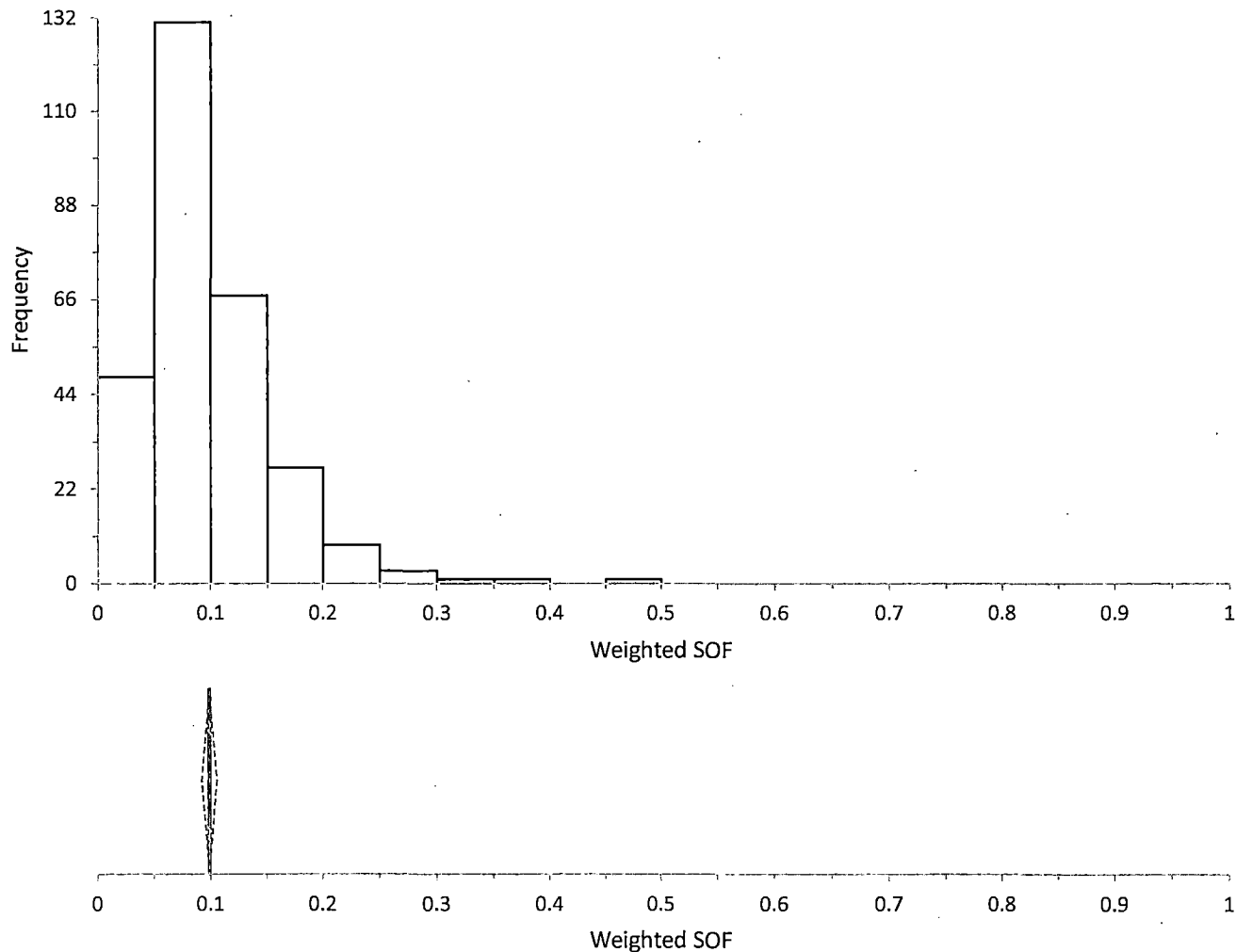
Attachment 2 to this report presents the complete analytical data set used to derive the original Reuse Stockpile 2 summary statistics presented in Table 7-3 above. Also, Attachment 3 to this report presents the box counter results in spreadsheet format for both original Reuse Stockpile 1 and original Reuse Stockpile 2.

Figure 7-2 below presents a graphical statistical summary of original Reuse Stockpile 2. The top graph is a histogram and line plot of the SOF for the data population comprising original Reuse Stockpile 2.

The middle graph presents the mean SOF (0.10 as indicated by the blue vertical line) of the sample population and the 95% confidence interval of the mean SOF represented by the blue diamond which is 0.092 to 0.106. The 96.1% confidence interval based on the median of the sample results is 0.08 to 0.93.

The bottom two charts present the various statistical metrics of the original Reuse Stockpile 2 SOF data set, including the mean, median, standard deviation, variance, minimum, maximum, confidence intervals, etc. Analysis using the ProUCL software indicated the data follows a lognormal distribution at a 5% significance level, with a suggested 95% H-UCL of 0.105 – see Appendix B of this report.

Figure 7-2
Statistical Summary for Reuse Stockpile 2 SOF (Uniform DCGL)



N : 288

	Mean	95% CI		Mean SE	SD	Variance	Skewness	Kurtosis
Weighted SOF	0.099	0.092	to 0.106	0.0035	0.059	0.003	2.2	8.81
	Minimum	1st quartile	Median	96.1% CI		3rd quartile	Maximum	IQR
Weighted SOF	0.02	0.061	0.086	0.080	to 0.093	0.122	0.50	0.061

7.5 ISO-Pacific Soil Sorting

The initial action level established for setup, calibration, and pre-operational quality checks for the S3 was set at 96 becquerels per kilogram. Background and pellet fragment testing was conducted between November 11 and November 14, 2013. Based upon the results of the setup, calibration and pre-operational quality checks on November 5, 2013, the initial action level for the S3 operation was set at 157 becquerels per kilogram (Bq/kg) (4.2 picocuries per gram (pCi/g)) total net activity.

The site began S3 soil sorting operations on November 15, 2013. After four weeks of operation, a technical review of the sorting metrics was performed due to the high volume of material being diverted to the waste stream. The review found that approximately 60% of the diversions occurred at activity concentrations less than 175 Bq/kg (4.7 pCi/g). A concentration less than 190 Bq/kg (5.1 pCi/g) was previously determined to be the worst case geometry scan minimum detectable activity (MDA) for a 0.19 μ Ci U-235 discrete item (pellet fragment). The results of the technical review were documented in Westinghouse memorandum HEM-13-MEMO-102, *Evaluation of the ISO-Pacific S3 Soil Sorting System*. In addition to evaluating the action level set point, "covered pellet" testing in numerous geometries was performed to verify that the action level increase would maintain the same level of confidence and that the S3 would reject a fuel pellet with a minimum activity of 0.19 μ Ci. As a result of the technical evaluation the action level was raised to 175 Bq/kg.

As discussed in NRC Inspection Report 07000036/2014001(DNMS), at the direction of the NRC, Oak Ridge Associated Universities (ORAU) observed the initial setup and trial run of the S3 in November 2013. As stated in ORAU Report 5184-SR-02-0 {ML14036A282}; *"The evaluation of the ISO-PACIFIC Soil Sorter System (S3) indicated that in its current configuration and operational set points, that the system was very conservative and diverted all contaminated soil and a substantial amount of "clean" soil."*

7.6 Combined Reuse Stockpile 1-2

During soil sorting operations, the soils from original Reuse Stockpile 1 and original Stockpile 2 were combined and processed through the S3 soil sorting system. Daily tracking data collected during the S3 operational period indicate that approximately 83.2 tons (< 1%) of the initial 10,305 ton combined mass estimate of the two original stockpiles were diverted to the "above the criteria" waste stream for offsite disposal. Given the analytical results of the total sample population of for original reuse Stockpile 1 and original Reuse Stockpile 2, the small amount of "above the criteria" soil diverted to the waste stream was not unexpected.

The complete data set for Combined Reuse Stockpile 1-2 includes a total of 563 separate analytical results corresponding to each container load of soil which comprised the total volume of each original Reuse Stockpile. In addition to the composite samples, there were 563 corresponding box counter assays. The average weighted SOF for the entire analytical dataset for Combined Reuse Stockpile 1-2 was 0.10 as evaluated against the Uniform DCGLs. As discussed in section 7.2 there was one truckload of soil that

exceeded the SOF for the Uniform DCGLS. As such, the individual truckload and Combined Reuse Stockpile 1-2 was evaluated against the Three Layer Approach DCGL_w values. The evaluation concludes that Combined Reuse Stockpile 1-2 is suitable for onsite backfill when restricted to placement in the Excavation Stratum.

Additionally, as previously discussed in sections in 7.2 and 7.4 there were a total of 4 exceedances of the Tc-99 Uniform MIL which included 2 exceedances of the Root Stratum Tc-99 MIL. The sample results for the 4 samples indicates that the Excavation MIL was not exceeded. Therefore, the evaluation also concludes that Combined Reuse Stockpile 1-2 is suitable for onsite backfill when restricted to placement in the Excavation Stratum.

Upon completion of processing the soil through the S3 sorter the new Combined Reuse Stockpile 1-2 was isolated and controlled in accordance with site procedure.

The volume of the original Reuse Stockpile 1 and the original Reuse Stockpile 2 that was not processed through the S3 and diverted to Reuse Stockpile 9 is estimated to be approximately 1,043 cyd.

Figure 7-3 below presents the overall statistical metrics for the SOF parameter for the combined Reuse Stockpile 1-2 dataset. The top graph is a histogram and line plot of the SOF for the data population comprising Combined Reuse Stockpile 1-2.

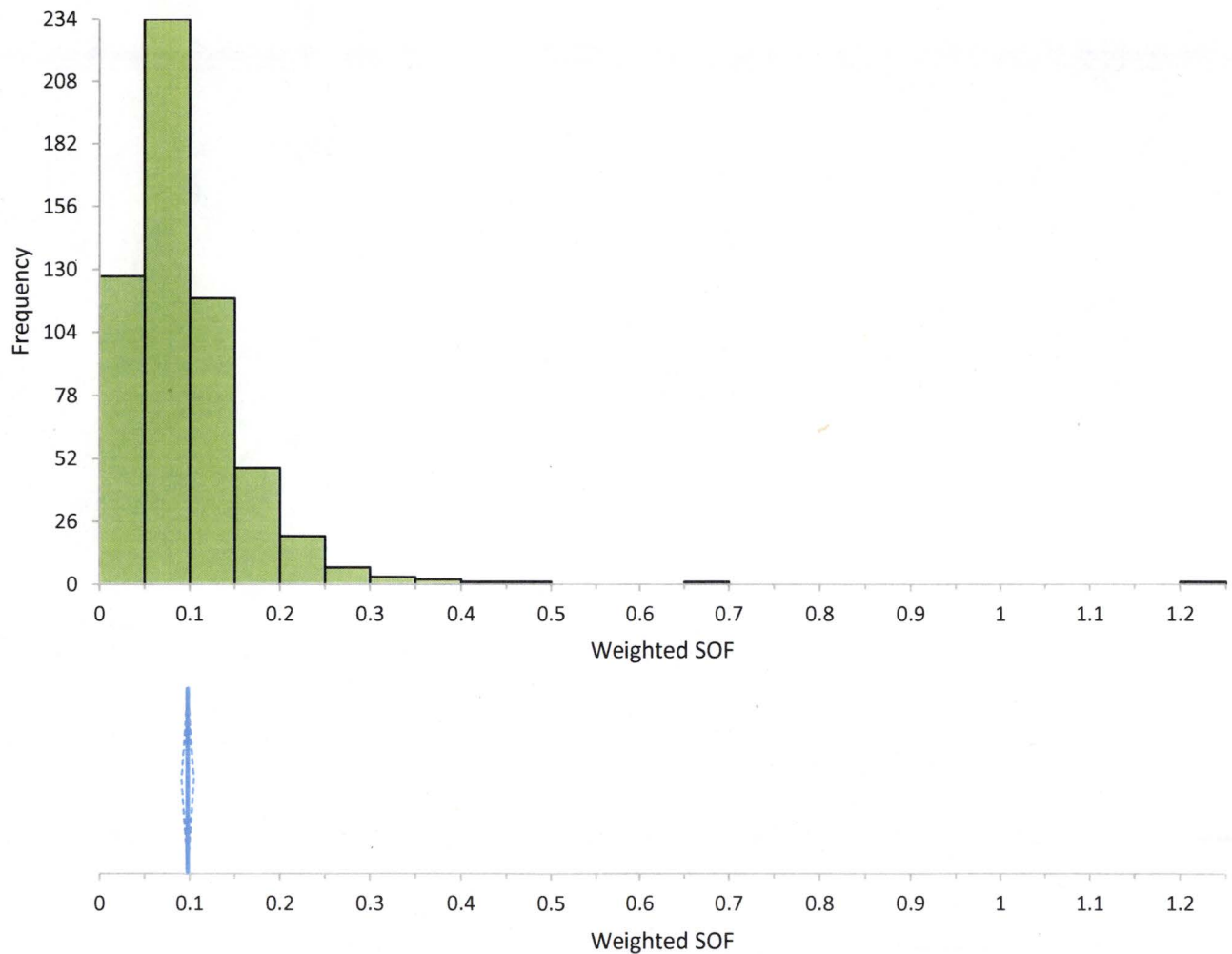
The middle graph presents the mean SOF (0.098 as indicated by the blue vertical line) of the sample population and the 95% confidence interval of the mean SOF represented by the blue diamond which is 0.091 to 0.105. The 95.7% confidence interval based on the median of the sample results is 0.075 to 0.087.

The bottom two charts present the various statistical metrics of Combined Reuse Stockpile 1-2 SOF data set, including the mean, median, standard deviation, variance, minimum, maximum, confidence intervals, etc. Analysis using the ProUCL software indicated the data follows a lognormal distribution at a 5% significance level, with a suggested 95% H-UCL of 0.102 – see Appendix C of this report.

Statistical Summary for the Combined Reuse Stockpile 1-2 Dataset – SOF parameter:

- Data population: 563
- Mean SOF for Combined Reuse Stockpile 1-2 (unweighted): 0.098
- Mean SOF for Combined Reuse Stockpile 1-2 (weighted): 0.098
- Mean Upper Confidence Interval (95th percentile): 0.102
- Median SOF (weighted): 0.081
- Maximum SOF (unweighted): 1.19
- Maximum SOF (weighted): 1.24
- Standard Deviation: 0.082

Figure 7-3
Statistical Summary for Combined Reuse Stockpile 1-2 SOF Parameter



N 563

	Mean	95% CI		Mean SE	SD	Variance	Skewness	Kurtosis
Weighted SOF	0.098	0.091	to 0.105	0.0034	0.082	0.007	6.3	72.72

	Minimum	1st quartile	Median	95.7% CI		3rd quartile	Maximum	IQR
Weighted SOF	0.01	0.053	0.081	0.075	to 0.087	0.120	1.24	0.068

8.0 QUALITY CONTROL

FSSFR Volume 2, Chapter 1, Section 5.0, *Quality Control*, contains a description of Quality Control common to Combined Reuse Stockpile 1-2 and all Reuse Stockpiles.

8.1 Stockpile 1 Data Subset

Of the 275 total truckloads comprising original Reuse Stockpile 1, eleven (11) duplicate samples were collected for Quality Control purposes (regular and associated field duplicate comparison). The summary of the Laboratory Quality Control Results of the samples are presented below in Table 8-1.

Table 8-1
Summary of Laboratory Quality Control Results Reuse Stockpile 1

Nuclide	Number of QC Samples	Number of Warning Limit	No. of times above the Control Limit
Ra-226	11	0	1
Th-232	11	0	0
Tc-99	11	0	0
U-235	11	0	0
U-238	11	0	0

Table 8-2, Reuse Stockpile 1 Quality Control Sample Data presents the sample and field duplicate sample data.

Sample	Ra-226 DCGL = 1.9 pCi/g BKG = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g BKG = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample SOF (Uniform DCGL)
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Results	Result	Error	MDC	Result	Error	MDC	
2675-RU-120514-02-09	0.78	0.10	0.05	< -0.02	0.25	0.43	0.96	0.13	0.08	3.34	0.18	0.09	0.13	0.86	0.22	0.53	0.03
2675-RU-120514-02-09-FD	0.64	0.09	0.04	< 0.25	0.29	0.48	0.95	0.12	0.06	2.58	0.14	0.07	0.11	1.43	0.45	0.53	0.03
2696-RU-120516-01-03	0.79	0.10	0.05	< 0.16	0.28	0.47	1.05	0.14	0.08	2.13	< 0.11	0.10	0.16	1.44	0.49	0.58	0.05
2696-RU-120516-01-03-FD	0.74	0.10	0.04	< 0.39	0.32	0.51	0.96	0.12	0.07	1.92	< 0.10	0.10	0.14	1.20	0.44	0.55	0.03
2716-RU-120521-02-09	0.85	0.10	0.04	0.89	0.35	0.51	0.99	0.13	0.09	5.73	0.32	0.09	0.12	1.61	0.48	0.54	0.08
2716-RU-120521-02-09-FD	0.83	0.10	0.04	< 0.15	0.31	0.51	0.98	0.12	0.08	4.27	0.23	0.10	0.12	1.42	0.41	0.52	0.04
2760-RU-120530-02-02	0.74	0.09	0.03	0.84	0.33	0.46	0.88	0.11	0.07	3.47	0.19	0.07	0.11	1.58	0.45	0.52	0.06
2760-RU-120530-02-02-FD	0.82	0.10	0.04	< 0.17	0.27	0.45	1.04	0.14	0.07	4.90	0.27	0.11	0.14	1.21	0.26	0.60	0.06
2796-RU-120604-01-06	1.35	0.16	0.05	< 0.46	0.31	0.48	1.18	0.15	0.08	5.83	0.32	0.11	0.15	1.69	0.53	0.62	0.39
2796-RU-120604-01-06-FD	0.94	0.12	0.05	< 0.13	0.29	0.49	0.99	0.15	0.07	3.88	0.21	0.11	0.13	1.60	0.51	0.60	0.06
2846-RU-120612-02-02	0.69	0.09	0.04	< -0.04	0.27	0.47	0.95	0.12	0.07	4.95	0.27	0.09	0.12	1.34	0.40	0.51	0.04
2846-RU-120612-02-02-FD	0.84	0.12	0.06	< 0.09	0.29	0.49	0.96	0.14	0.10	5.30	0.29	0.10	0.14	1.70	0.54	0.62	0.05
2881-RU-120618-02-07	0.67	0.09	0.04	< -0.04	0.30	0.52	1.06	0.14	0.07	4.18	0.23	0.10	0.13	1.10	0.25	0.58	0.06
2881-RU-120618-02-07-FD	0.77	0.10	0.05	< -0.05)	0.30	0.52	0.99	0.13	0.07	2.25	< 0.12	0.09	0.14	1.39	0.45	0.55	0.02
2930-RU-120626-01-04	0.79	0.11	0.06	< 0.04	0.26	0.46	1.05	0.16	0.10	5.46	0.30	0.17	0.18	1.61	0.64	0.76	0.07
2930-RU-120626-01-04-FD	0.93	0.14	0.07	< 0.32	0.28	0.45	1.16	0.18	0.12	3.36	0.18	0.13	0.17	1.61	0.69	0.84	0.14
2958-RU-120704-02-04	0.70	0.10	0.06	< 0.03	0.28	0.48	1.00	0.15	0.09	5.64	0.31	0.12	0.16	1.51	0.62	0.74	0.04
2958-RU-120704-02-04-FD	0.90	0.14	0.07	< 0.08	0.26	0.44	1.06	0.17	0.14	8.16	0.45	0.18	0.20	1.94	0.68	0.83	0.10
2997-RU-120710-01-06	0.91	0.14	0.08	< -0.10	0.28	0.50	1.24	0.18	0.11	5.76	0.31	0.12	0.18	2.56	0.88	0.93	0.18
2997-RU-120710-01-06-FD	0.76	0.11	0.05	< -0.29	0.27	0.49	0.96	0.18	0.09	4.55	0.24	0.12	0.18	2.47	0.68	0.78	0.04
3025-RU-120716-02-09																	

1. “<” indicates results that are less than MDC.

8.1.1 Quality Control Sample Warning and Control Limit Exceedance

The statistical assessment of the Laboratory QC sample results indicated that all field duplicate samples collected showed results less than the calculated Warning and Control Limits, with the exception of one sample. The one sample result that exceeded the Control Limit was sample 2796-RU-120604-01-06 for Ra-226. In accordance with procedure HDP-PR-FSS-703, when an exceedance occurs an investigation is performed to determine if corrective actions were necessary. The investigation determined that for Ra-226, the calculated statistic (0.41) only slightly exceeded the calculated Control Limit (0.40).

Also, considering the low activity and the errors associated with the sample results, the Ra-226 activity of both samples were relatively close. A review of the activities of the other radionuclides with activities above MDA for all of the samples for original Reuse Stockpile 1 indicated that they were consistent. Also, the calculated statistics for all other samples were less than the Warning Limits, indicating that the identified exceedance for Ra-226 was not an issue with the sample homogeneity. Based upon the investigation of the exceedance and the results of previous and ongoing (2011 through 2015) Quality Assurance audits of the overall performance of the laboratory, no corrective actions were determined to be necessary.

8.1.2 Quality Control Sample Frequency

HDP-PO-FSS-700, *Final Status Survey Program*, Section 14.5 states that “During the FSS within an open land survey unit, the laboratory will be assessed through the analysis of field and laboratory duplicate samples.” and “Both types of quality assurance samples will be analyzed at a frequency of one sample per 20 final status samples collected (5%).” Although reuse stockpiles are not open land survey units, HDP chose to apply the 5% sample frequency to composite sampling of reuse stockpiles.

A review of the data for original Reuse Stockpile 1 indicated that 11 Quality Control samples were collected and analyzed, which represents a Quality Control sample frequency that equates to 4%. To determine if there could be a negative impact on the assessment of the quality of the laboratory analysis programs as a result of a sample frequency of 4 % for original Reuse Stockpile 1 a review of all Quality Control sampling for reuse soil was conducted. Table 8-3 provides the data of the Quality Control samples for reuse soil.

Table 8-3
Reuse Soil Quality Control Samples

Stockpile Number	1	2	3	4	5	6	7	8a	8b	9	TOTAL
Number of Quality Control Samples	11	14	15	13	1	2	17	11	2	18	104
Number of Composite Samples	275	288	260	211	14	28	299	256	108	252	1991
Percentage (%)	4.0	4.9	5.8	6.2	7.1	7.1	5.7	4.3	1.9	7.1	5.2

Based upon the review of the number of reuse soil composite samples and Quality Control samples taken for all reuse soil, and in consideration of the results of previous and ongoing (2011 through 2015) Quality Assurance audits of the overall performance of the laboratory the sample frequency for original Reuse Stockpile 1 did not have a negative impact on Westinghouse's ability to assess the quality of the laboratory analysis programs.

8.2 Stockpile 2 Data Subset

Of the 288 total truckloads comprising original Reuse Stockpile 2, fourteen (14) duplicate samples were collected for Quality Control purposes (regular and associated field duplicate comparison). The summary of the Laboratory Quality Control Results of the samples are presented below in Table 8-4.

Table 8-4
Summary of Laboratory Quality Control Results Reuse Stockpile 2

Nuclide	Number of QC Samples	Number of Warning Limit	No. of times above the Control Limit
Ra-226	14	0	0
Th-232	14	0	0
Tc-99	14	0	0
U-235	14	0	0
U-238	14	0	0

Table 8-5, Reuse Stockpile 2 Quality Control Sample Data presents the sample and field duplicate sample data.

Sample	Ra-226 DCGL = 1.9 pCi/g BKG = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g BKG = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample SOF (Uniform DCGL)
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Results	Result	Error	MDC	Result	Error	MDC	
2660-RU-120510-01-02	0.90	0.11	0.05	0.85	0.38	0.55	0.96	0.13	0.07	5.03	0.28	0.10	0.14	1.24	0.26	0.53	0.07
2660-RU-120510-01-02-FD	0.99	0.13	0.05	0.60	0.33	0.50	1.02	0.15	0.11	4.43	0.24	0.12	0.15	1.79	0.55	0.63	0.12
2632-RU-120508-01-01	0.69	0.09	0.05	< 0.38	0.31	0.49	0.94	0.14	0.06	3.40	0.19	0.09	0.12	1.11	0.45	0.54	0.04
2632-RU-120508-01-01-FD	0.81	0.11	0.05	< 0.25	0.31	0.52	0.90	0.13	0.08	2.88	0.16	0.08	0.11	1.01	0.24	0.56	0.10
2562-RU-120426-02-08	0.88	0.11	0.04	< 0.36	0.28	0.45	0.98	0.13	0.08	11.07	0.61	0.11	0.13	2.75	0.65	0.67	0.10
2562-RU-120426-02-08-FD	0.85	0.12	0.05	< 0.12	0.29	0.49	1.01	0.15	0.08	12.13	0.67	0.16	0.15	2.19	0.59	0.06	0.10
2551-RU-120425-02-07	0.95	0.16	0.08	0.57	0.28	0.41	1.10	0.19	0.09	12.16	0.67	0.22	0.24	3.00	0.86	0.99	0.19
2551-RU-120425-02-07-FD	1.11	0.16	0.08	0.81	0.38	0.57	1.22	0.18	0.14	10.50	0.58	0.15	0.20	1.90	0.45	0.97	0.33
2536-RU-120424-02-05	0.97	0.15	0.06	< -0.03	0.32	0.56	1.12	0.16	0.06	3.81	0.21	0.15	0.20	< 0.90	0.36	0.92	0.13
2536-RU-120424-02-05-FD	0.94	0.16	0.08	< 0.23	0.31	0.51	1.12	0.22	0.14	2.67	< 0.14	0.17	0.28	1.54	0.77	0.95	0.12
2514-RU-120419-02-02	1.09	0.15	0.06	< 0.12	0.29	0.49	1.05	0.17	0.11	5.25	0.29	0.15	0.21	1.11	0.36	0.90	0.17
2514-RU-120419-02-02-FD	1.08	0.15	0.06	< 0.08	0.32	0.54	1.29	0.17	0.10	1.50	< 0.08	0.14	0.24	< 0.73	0.33	0.82	0.26
2497-RU-120417-02-07	0.78	0.12	0.06	< 0.10	0.27	0.46	1.04	0.16	0.09	4.58	0.25	0.14	0.17	1.54	0.73	0.91	0.06
2497-RU-120417-02-07-FD	0.88	0.12	0.05	< 0.18	0.28	0.46	1.12	0.16	0.10	6.56	0.36	0.14	0.19	1.90	0.70	0.81	0.12
2460-RU-120410-02-09	0.90	0.13	0.06	< 0.32	0.31	0.51	1.09	0.17	0.09	5.45	0.30	0.14	0.24	1.46	0.58	0.76	0.10
2460-RU-120410-02-09-FD	0.96	0.15	0.08	< 0.19	0.32	0.53	1.00	0.16	0.14	3.87	0.21	0.16	0.20	1.46	0.66	0.84	0.07
2426-RU-120404-01-04	0.84	0.12	0.05	< 0.21	0.30	0.49	1.05	0.17	0.10	3.64	0.20	0.11	0.16	1.02	0.50	0.67	0.06
2426-RU-120404-01-04-FD	0.75	0.12	0.07	< -0.04	0.30	0.53	1.01	0.18	0.12	1.96	< 0.10	0.13	0.24	1.49	0.71	0.84	0.03
2408-RU-120402-01-07	0.69	0.11	0.06	0.85	0.37	0.55	0.95	0.16	0.10	9.43	0.52	0.15	0.17	2.25	0.72	0.79	0.11
2408-RU-120402-01-07-FD	0.61	0.10	0.06	< 0.45	0.31	0.49	0.88	0.13	0.08	8.01	0.44	0.16	0.20	2.37	0.75	0.79	0.08
2394-RU-120329-01-04	0.63	0.11	0.07	0.47	0.28	0.43	1										

1. “<” indicates results that are less than MDC.

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8.2.1 Quality Control Sample Warning and Control Limit Exceedance

There were no Warning or Control Limit exceedances for original Reuse Stockpile 2 Quality Control samples.

8.2.2 Quality Control Sample Frequency

A review of the data for original Reuse Stockpile 2 indicated that fourteen (14) Quality Control samples were collected and analyzed, which represents a Quality Control sample frequency that equates to 4.9%.

As provided in section 8.1.2, based upon the review of the number of reuse soil composite samples and Quality Control samples taken for all reuse soil, and in consideration of the results of previous and ongoing (2011 through 2015) Quality Assurance audits of the overall performance of the laboratory, the sample frequency for original Reuse Stockpile 2 of 4.9% did not have a negative impact on Westinghouse's ability to assess the quality of the laboratory analysis programs.

9.0 DATA QUALITY ASSESSMENT (DQA) – (Applies to Stockpile 1 and Stockpile 2 Data Sets)

The Data Quality Assessment of the survey methodology, sampling and sample analysis results, and Quality Control sampling and analysis results to ascertain the validity of the conclusion for Combined Reuse Stockpile 1-2 provides the following:

- The field and laboratory instruments utilized were capable of detecting activity at an MDC less than the appropriate investigation level, and were verified to be operable prior to and after use in accordance with HDP-PR-HP-416 (*Operation of the Ludlum 2221 for Final Status Survey*).
- The calibration of all instruments that were used to measure or analyze data was current at the time of use and the calibrations of the instruments were performed using a NIST traceable source. The instruments used were successfully source checked prior to use.
- All samples were collected at random locations and gamma scan surveys were performed in accordance with procedure HDP-PR-FSS-710 (*Final Status Survey and Radiological Sampling of Reuse Soil*).
- All samples sent for analysis at the approved offsite laboratory (TestAmerica) were tracked on a chain of custody form in accordance with HDP-PR-QA-006, *Chain of Custody*.
- Quality Control sample results were verified to meet the acceptance criteria as specified in HDP-PR-FSS-703, *Final Status Survey Quality Control*, with the exception of one sample (See section 8.1.1 and 8.1.2).
- Reuse Stockpile 1 and Reuse Stockpile 2 sample results were independently reviewed and validated in accordance with HDP-PR-FSS-721 *Final Status Survey Data Validation*, and are provided in Attachments 1, 2, and 3.

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<p>Sections 7.2 and 7.4 provide the results of review of the original Reuse Stockpile 1 and original Reuse Stockpile 2 sample data. The review indicates that both the original Reuse Stockpile 1 and original Stockpile 2 met the reuse soil criteria for placement within the excavation stratum.</p> <ul style="list-style-type: none"> • The calculated average SOF values of both original Reuse Stockpile 1 and original Reuse Stockpile 2 when compared to the Uniform Stratum is 0.10, and the $UCL_{(0.95)}$ is 0.102. These outcomes are indicative of fairly homogeneous soils (both derived from Burial Pits area overburden) and a consistent implementation of the survey and sampling methodology required by procedure HDP-PR-FSS-710, <i>Final Status Surveys and Radiological Sampling of Re-Use Soil</i>, and the Hematite Decommissioning Plan. • The review of the statistical evaluation of original Reuse Stockpile 1 and original Reuse Stockpile 2 indicates that the data for the stockpiles are of the correct type, quantity and quality to support a conclusion in regards to the acceptability of Combined Reuse Stockpile 1-2. • In addition to original Reuse Stockpile 1 and original Reuse Stockpile 2 meeting the reuse soil criteria by demonstration with the approved survey methodology, the soil that comprises Combined Reuse Stockpile 1-2 was successfully processed through the S3 Soil Sorter. 		
<p>10.0 CONCLUSION</p> <p>An adequate quantity and quality of radiological surveys and samples, as well as the corresponding laboratory analysis has been performed, evaluated and documented to demonstrate that the dose associated with Combined Reuse Stockpile 1-2 would not cause the dose associated with residual radioactivity in a survey unit in which the soil is placed to exceed the dose criterion for unrestricted release in accordance with 10 CFR 20.1402.</p>		
<p>11.0 DOSE CONTRIBUTION TO THE LSA SURVEY UNIT</p> <p>As communicated to the NRC in Westinghouse letter HEM-15-66 to NRC dated June 30, 2015, as stated in Attachment 1, the Uniform $DCGL_w$ will continue to be used to evaluate the dose impact of using Combined Reuse Stockpile 1-2 as backfill within a LSA survey unit. As such, Combined Reuse Stockpile 1-2 has been calculated to contribute 2.5 mrem/year to the total dose of a survey unit when evaluated against the Uniform release criteria (a SOF of 0.10 rounded up from 0.098). Therefore, 2.5 mrem/year will be added to the total dose calculation for survey unit LSA 10-14, where Combined Reuse Stockpile 1-2 was used as backfill.</p> <p>Additionally, prior to sorting operations with the ISO-Pacific S3 Soil Sorter which combined original Reuse Stockpiles 1 and 2, a small amount of original Reuse Stockpile 2 soil was used as backfill in LSA 05-02. As noted in Volume 2, Chapter 1, Section 4.5.1, subsequent to the initial NRC approval of Reuse Stockpile 2 {ML13032A582}, but prior to the discovery of the fuel pellet that prompted the corrective actions, one truck load of soil from Reuse Stockpile 2 was placed as backfill into LSA 05-02. This soil was spread out in an approximate 6 inch layer and a GWS was</p>		

conducted on the truck load of soil before it was covered by off-site backfill soil. This one truck load of soil was placed in LSA 05-02 in an attempt to stop ground water intrusion from the site spring located in the adjacent LSA 05-01. However the proposed plan to place the soil in 6 inch layers for GWS proved to be too difficult and time consuming to execute safely in the field, so in order to stop the ground water intrusion in a timely manner, the remaining backfill was performed with offsite borrow soil. Therefore, as a conservative measure, 2.5 mrem/year will be added to the total dose calculation for survey unit LSA 05-02, where Reuse Stockpile 2 was used as backfill.

12.0 MANAGEMENT OF COMBINED REUSE STOCKPILE 1-2 AS BACKFILL

Upon completion of processing the soil through the S3 sorter the new Combined Reuse Stockpile 1-2 was isolated and controlled in accordance with site procedure. Combined Reuse Stockpile 1-2 remained isolated until such time that operations commenced to use the stockpile as backfill material.

In accordance with HDP-WP-ENG-802, *Backfill & Site Restoration*, the Radiation Safety Officer performed the required evaluation to determine the placement of the stockpile based upon the following;

- With a weighted mean SOF of 0.10 for Combined Reuse Stockpile 1-2 the dose associated with the stockpile when placed as backfill in an excavation is 2.5 mrem/year.
- Placement of the Combined Reuse Stockpile 1-2 is restricted to the Excavation Stratum.
- Combined Reuse Stockpile 1-2 volume of approximately 3,673 cubic yards.
- LSA survey units with sufficient capacity within the Excavation Stratum to accept designated reuse soil.
- Logistics and travel routes for transfer operations.

Based upon the evaluation Combined Reuse Stockpile 1-2 was placed in its entirety into LSA 10-14 within the Excavation (Deep) Stratum.

In accordance with HDP-WP-ENG-802, the placement of Combined Reuse Stockpile 1-2 was observed and documented by Health Physics and Project Engineering to ensure proper placement within geographic boundaries of LSA 10-14 as well as within the Excavation Stratum. Physical markers were put in place to provide visual aid to Heavy Equipment Operators, and Civil Survey techniques were used to confirm that the final placement was deeper than 5 feet from the final grade of the area and that all of the stockpile remained within the boundary of LSA 10-14.

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>	
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<div>Attachment 1</div> <div>Reuse Stockpile 1 Sample Data and Calculated SOF Values</div>		

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																				
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Attachment 1 Reuse Stockpile 1 Sample Data and Calculated SOF Values																					
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Result	Result	Error	MDC	Result	Error	MDC					
2226-RU-120130-01-01	0.92	0.13	0.07	2.18	0.42	0.43	1.14	0.17	0.09	6.35	0.35	0.13	0.18	1.55	0.38	0.85	0.216	25780	66360	0.00404	0.240
2226-RU-120130-01-02	0.85	0.13	0.07	4.61	0.67	0.50	1.06	0.15	0.03	11.79	0.65	0.20	0.21	2.82	0.84	0.94	0.303	25780	69580	0.00436	0.364
2674-RU-120514-01-01	0.77	0.12	0.06	0.02	0.35	0.60	0.98	0.14	0.12	3.25	0.17	0.10	0.15	1.54	0.59	0.69	0.030	25780	65560	0.00396	0.033
2674-RU-120514-01-02	0.79	0.10	0.04	-0.01	0.29	0.51	1.04	0.14	0.08	2.96	0.16	0.11	0.13	1.19	0.52	0.62	0.045	25780	64100	0.00382	0.048
2674-RU-120514-01-03	0.71	0.09	0.04	-0.13	0.27	0.49	0.94	0.12	0.06	4.10	0.23	0.09	0.13	1.18	0.37	0.46	0.032	25780	67380	0.00415	0.037
2674-RU-120514-01-04	0.74	0.10	0.04	-0.06	0.27	0.46	0.94	0.13	0.08	2.36	0.13	0.08	0.12	1.20	0.43	0.54	0.022	25780	69380	0.00434	0.026
2674-RU-120514-01-05	0.65	0.10	0.05	0.25	0.36	0.59	0.82	0.13	0.09	3.88	0.21	0.11	0.13	1.53	0.47	0.55	0.043	25780	71420	0.00455	0.054
2674-RU-120514-02-01	0.75	0.10	0.04	-0.11	0.32	0.57	1.01	0.13	0.09	4.41	0.24	0.10	0.12	1.28	0.42	0.51	0.040	23500	56780	0.00332	0.036
2674-RU-120514-02-02	0.62	0.08	0.03	-0.23	0.30	0.54	0.86	0.11	0.07	5.11	0.28	0.10	0.12	1.56	0.40	0.48	0.041	23500	60420	0.00368	0.041
2674-RU-120514-02-03	0.77	0.10	0.05	0.02	0.28	0.48	1.08	0.14	0.08	2.43	0.13	0.10	0.17	1.25	0.46	0.57	0.063	23500	57440	0.00338	0.059
2674-RU-120514-02-04	0.75	0.10	0.05	-0.12	0.29	0.51	1.00	0.14	0.08	1.73	0.09	0.08	0.12	1.10	0.41	0.53	0.017	23500	56380	0.00328	0.015
2674-RU-120514-02-05	0.67	0.10	0.05	-0.07	0.28	0.49	0.90	0.14	0.11	3.28	0.18	0.10	0.18	0.93	0.27	0.64	0.026	23500	61700	0.00381	0.027
2675-RU-120514-01-06	0.65	0.08	0.04	0.31	0.31	0.51	0.97	0.13	0.07	2.72	0.15	0.09	0.12	0.98	0.37	0.47	0.035	25780	62700	0.00368	0.035
2675-RU-120514-01-07	0.67	0.10	0.05	0.11	0.32	0.54	1.01	0.13	0.07	2.40	0.13	0.09	0.12	0.97	0.22	0.50	0.030	25780	63320	0.00374	0.031
2675-RU-120514-01-08	0.66	0.10	0.05	0.04	0.27	0.46	0.96	0.15	0.08	4.32	0.24	0.09	0.12	1.07	0.47	0.57	0.035	25780	65080	0.00392	0.037
2675-RU-120514-01-09	0.69	0.09	0.04	0.02	0.30	0.52	1.04	0.13	0.07	2.10	0.11	0.08	0.12	0.77	0.24	0.58	0.038	25780	62200	0.00363	0.038
2675-RU-120514-01-10	0.64	0.09	0.05	-0.09	0.30	0.53	0.93	0.15	0.08	3.21	0.18	0.09	0.12	0.96	0.24	0.56	0.026	25780	59060	0.00332	0.023
2675-RU-120514-02-06	0.63	0.09	0.04	0.23	0.30	0.49	0.92	0.12	0.09	4.05	0.22	0.10	0.13	1.12	0.39	0.48	0.041	23500	57120	0.00335	0.038
2675-RU-120514-02-07	0.75	0.09	0.04	0.05	0.30	0.52	1.08	0.14	0.06	1.67	0.09	0.09	0.15	1.11	0.37	0.47	0.059	23500	59200	0.00356	0.058
2675-RU-120514-02-08	0.75	0.10	0.04	-0.02	0.29	0.50	1.03	0.14	0.08	2.06	0.11	0.10	0.16	0.99	0.23	0.52	0.034	23500	58340	0.00347	0.032
2675-RU-120514-02-09	0.78	0.10	0.05	-0.02	0.25	0.43	0.96	0.13	0.08	3.34	0.18	0.09	0.13	0.86	0.22	0.53	0.026	23500	56640	0.00330	0.023
2675-RU-120514-02-10	0.73	0.10	0.06	0.11	0.26	0.44	0.94	0.13	0.08	1.81	0.10	0.07	0.11	1.09	0.50	0.60	0.022	23500	54880	0.00313	0.019
2681-RU-120515-01-01	0.71	0.10	0.05	0.18	0.28	0.46	0.88	0.13	0.08	4.04	0.22	0.11	0.13	1.40	0.46	0.57	0.040	25780	67300	0.00414	0.046
2681-RU-120515-01-02	0.62	0.09	0.05	0.58	0.32	0.48	0.84	0.12	0.08	4.94	0.27	0.09	0.12	0.98	0.25	0.58	0.059	25780	70260	0.00443	0.073
2681-RU-120515-01-03	0.70	0.09	0.04	0.12	0.24	0.41	1.13	0.14	0.08	2.98	0.16	0.07	0.10	1.31	0.48	0.55	0.096	25780	66940	0.00410	0.108
2681-RU-120515-01-04	0.64	0.09	0.05	0.26	0.32	0.52	0.96	0.12	0.08	2.38	0.13	0.10	0.12	0.81	0.20	0.48	0.030	25780	67580	0.00417	0.034
2681-RU-120515-01-05	0.77	0.11	0.05	0.38	0.30	0.48	1.01	0.15	0.11	3.68	0.20	0.12	0.16	1.34	0.46	0.59	0.051	25780	61000	0.00351	0.049
2681-RU-120515-02-01	0.73	0.10	0.06	0.04	0.28	0.49	1.10	0.15	0.07	1.72	0.09	0.11	0.18	1.02	0.28	0.66	0.068	23500	57760	0.00341	0.064
2681-RU-120515-02-02	0.69	0.10	0.05	0.07	0.27	0.46	0.99	0.14	0.09	2.65	0.14	0.09	0.11	1.22	0.46	0.58	0.026	23500	55480	0.00319	0.023
2681-RU-120515-02-03	0.74	0.10	0.04	0.30	0.29	0.47	1.08	0.15	0.07	4.60	0.25	0.10	0.11	1.66	0.52	0.57	0.090	23500	60180	0.00365	0.091
2681-RU-120515-02-04	0.75	0.10	0.04	0.21	0.28	0.46	1.01	0.14	0.08	2.46	0.13	0.10	0.13	1.38	0.47	0.56	0.037	23500	60420	0.00368	0.037
2681-RU-120515-02-05	0.74	0.10	0.05	-0.09	0.27	0.47	1.00	0.13	0.08	2.75	0.15	0.08	0.12	0.84	0.23	0.54	0.022	23500	56060	0.00324	0.020
2696-RU-120516-01-03	0.79	0.10	0.05	0.16	0.28	0.47	1.05	0.14	0.08	2.13	0.11	0.10	0.16	1.44	0.49	0.58	0.053	25780	62240	0.00363	0.053

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Attachment 1 Reuse Stockpile 1 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Result	Result	Error	MDC	Result	Error	MDC						
2696-RU-120516-01-04	0.82	0.11	0.05	0.19	0.26	0.43	1.15	0.15	0.09	5.01	0.27	0.10	0.14	1.64	0.53	0.62	0.123	25780	65040	0.00391	0.133	
2696-RU-120516-01-05	0.79	0.11	0.05	0.05	0.26	0.44	1.01	0.15	0.10	4.04	0.22	0.12	0.16	1.42	0.57	0.70	0.040	25780	64300	0.00384	0.043	
2696-RU-120516-02-04	0.75	0.09	0.04	0.17	0.23	0.39	1.07	0.15	0.07	3.52	0.19	0.12	0.14	1.45	0.46	0.54	0.072	23500	54400	0.00308	0.061	
2696-RU-120516-02-05	0.74	0.11	0.05	0.03	0.26	0.45	1.00	0.15	0.10	4.58	0.25	0.11	0.17	1.58	0.53	0.62	0.039	23500	57060	0.00334	0.036	
2696-RU-120516-02-06	0.81	0.10	0.04	-0.02	0.23	0.40	1.13	0.14	0.07	2.91	0.15	0.10	0.14	1.94	0.56	0.61	0.094	23500	55220	0.00316	0.082	
2715-RU-120521-01-01	0.70	0.10	0.05	0.02	0.29	0.50	1.00	0.14	0.09	2.48	0.13	0.10	0.16	1.02	0.25	0.55	0.022	25780	66500	0.00406	0.025	
2715-RU-120521-01-02	0.68	0.09	0.04	0.13	0.30	0.50	0.95	0.12	0.06	3.08	0.17	0.08	0.12	1.19	0.44	0.53	0.031	25780	63940	0.00380	0.033	
2715-RU-120521-01-03	0.70	0.10	0.05	0.04	0.29	0.49	1.04	0.15	0.09	0.48	0.02	0.11	0.18	0.78	0.24	0.64	0.029	25780	63400	0.00375	0.030	
2715-RU-120521-01-04	0.80	0.11	0.05	0.06	0.27	0.46	0.97	0.14	0.09	1.57	0.08	0.13	0.23	1.15	0.72	0.99	0.019	25780	64120	0.00382	0.020	
2715-RU-120521-02-01	0.72	0.09	0.04	0.67	0.34	0.52	1.05	0.13	0.08	4.31	0.24	0.08	0.12	1.54	0.50	0.59	0.087	23500	58280	0.00347	0.083	
2715-RU-120521-02-02	0.66	0.08	0.04	0.06	0.26	0.45	0.93	0.12	0.06	2.99	0.16	0.10	0.12	1.37	0.43	0.51	0.029	23500	57080	0.00335	0.027	
2715-RU-120521-02-03	0.68	0.10	0.05	0.23	0.31	0.50	0.91	0.13	0.08	3.57	0.19	0.07	0.12	1.33	0.46	0.55	0.039	23500	52440	0.00288	0.031	
2715-RU-120521-02-04	0.74	0.09	0.04	-0.13	0.26	0.46	1.08	0.13	0.07	0.96	0.04	0.08	0.15	1.24	0.43	0.52	0.053	23500	56620	0.00330	0.048	
2715-RU-120521-02-05	0.77	0.10	0.05	0.02	0.30	0.51	1.14	0.14	0.09	2.76	0.15	0.11	0.13	1.03	0.27	0.65	0.094	23500	55720	0.00321	0.083	
2716-RU-120521-01-05	0.79	0.11	0.05	0.00	0.27	0.46	0.97	0.15	0.11	1.39	0.07	0.11	0.18	1.13	0.52	0.63	0.015	25780	54860	0.00290	0.012	
2716-RU-120521-01-06	0.97	0.12	0.05	-0.01	0.27	0.47	0.92	0.13	0.07	10.14	0.56	0.13	0.17	2.09	0.48	0.55	0.112	25780	67000	0.00411	0.126	
2716-RU-120521-01-07	0.65	0.09	0.04	0.07	0.29	0.49	0.84	0.12	0.07	7.57	0.42	0.09	0.11	1.94	0.46	0.52	0.061	25780	66780	0.00409	0.069	
2716-RU-120521-01-08	0.68	0.10	0.06	0.21	0.26	0.43	0.97	0.14	0.07	4.32	0.24	0.10	0.12	1.11	0.26	0.58	0.042	25780	63580	0.00377	0.043	
2716-RU-120521-01-09	0.73	0.10	0.04	2.18	0.45	0.50	0.97	0.13	0.07	8.15	0.45	0.09	0.11	1.76	0.46	0.52	0.148	25780	65600	0.00397	0.161	
2716-RU-120521-01-10	0.62	0.08	0.04	0.13	0.27	0.45	0.94	0.12	0.07	4.39	0.24	0.08	0.12	1.28	0.40	0.49	0.040	25780	64340	0.00384	0.042	
2716-RU-120521-02-06	0.97	0.13	0.06	0.12	0.28	0.47	1.06	0.15	0.09	7.67	0.42	0.13	0.14	2.40	0.61	0.68	0.133	23500	57620	0.00340	0.125	
2716-RU-120521-02-07	0.79	0.11	0.05	0.02	0.26	0.44	0.97	0.13	0.07	11.05	0.61	0.16	0.16	1.85	0.58	0.66	0.080	23500	56360	0.00327	0.072	
2716-RU-120521-02-08	0.68	0.09	0.06	0.64	0.34	0.52	0.93	0.13	0.07	9.05	0.50	0.14	0.15	1.89	0.61	0.67	0.093	23500	60480	0.00368	0.094	
2716-RU-120521-02-09	0.85	0.10	0.04	0.89	0.35	0.51	0.99	0.13	0.09	5.73	0.32	0.09	0.12	1.61	0.48	0.54	0.080	23500	56660	0.00330	0.073	
2716-RU-120521-02-10	0.84	0.11	0.05	6.59	0.85	0.51	0.92	0.13	0.09	10.68	0.59	0.11	0.14	2.08	0.49	0.56	0.341	23500	59380	0.00358	0.335	
2724-RU-120522-01-01	0.88	0.11	0.05	0.12	0.31	0.53	1.04	0.13	0.07	4.42	0.24	0.11	0.16	1.68	0.53	0.60	0.062	25780	65800	0.00399	0.068	
2724-RU-120522-01-02	0.83	0.12	0.06	0.01	0.33	0.57	0.92	0.14	0.09	3.85	0.21	0.10	0.13	1.36	0.54	0.64	0.032	25780	67340	0.00414	0.037	
2724-RU-120522-01-03	0.92	0.11	0.04	-0.15	0.31	0.55	1.12	0.14	0.07	1.98	0.10	0.08	0.11	1.22	0.39	0.49	0.090	25780	63260	0.00373	0.092	
2724-RU-120522-01-04	0.74	0.09	0.04	-0.11	0.28	0.50	0.89	0.11	0.07	1.73	0.09	0.09	0.14	1.20	0.37	0.47	0.018	25780	63420	0.00375	0.018	
2724-RU-120522-01-05	0.87	0.11	0.05	0.39	0.38	0.61	0.98	0.14	0.08	5.19	0.28	0.09	0.13	1.89	0.53	0.61	0.059	25780	63980	0.00381	0.061	
2724-RU-120522-02-01	0.79	0.10	0.05	0.12	0.29	0.49	0.85	0.12	0.07	3.69	0.20	0.10	0.13	1.21	0.35	0.45	0.035	23500	62100	0.00385	0.037	
2724-RU-120522-02-02	0.75	0.10	0.04	0.01	0.29	0.49	0.90	0.12	0.08	3.23	0.18	0.08	0.11	1.25	0.43	0.51	0.028	23500	60180	0.00365	0.028	
2724-RU-120522-02-03	0.80	0.11	0.05	-0.02	0.27	0.47	0.92	0.14	0.09	1.73	0.09	0.11	0.17	1.08	0.48	0.60	0.017	23500	61280	0.00376	0.018	

Attachment 1
Reuse Stockpile 1 Sample Data and Calculated SOF Values

Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Result	Result	Error	MDC	Result	Error	MDC					
2724-RU-120522-02-04	0.62	0.08	0.04	-0.08	0.27	0.47	0.93	0.12	0.07	2.81	0.15	0.10	0.12	1.40	0.43	0.52	0.026	23500	60580	0.00369	0.026
2726-RU-120522-01-06	0.98	0.14	0.06	0.10	0.23	0.38	1.06	0.15	0.12	3.34	0.18	0.12	0.16	1.44	0.31	0.68	0.105	25780	68860	0.00429	0.124
2726-RU-120522-01-07	1.08	0.14	0.06	0.22	0.25	0.41	0.95	0.17	0.10	5.53	0.30	0.10	0.14	2.10	0.63	0.70	0.150	25780	67420	0.00415	0.171
2726-RU-120522-01-08	0.76	0.10	0.05	-0.09	0.26	0.46	0.91	0.12	0.07	2.16	0.12	0.09	0.12	0.96	0.26	0.60	0.019	25780	64360	0.00384	0.020
2726-RU-120522-01-09	0.88	0.11	0.05	0.28	0.25	0.40	1.05	0.14	0.08	3.82	0.21	0.10	0.12	1.07	0.26	0.62	0.066	25780	64400	0.00385	0.070
2726-RU-120522-02-05	0.93	0.14	0.07	0.04	0.23	0.39	1.04	0.17	0.11	4.04	0.22	0.12	0.16	1.45	0.42	0.61	0.071	23500	62220	0.00386	0.075
2726-RU-120522-02-06	0.86	0.11	0.05	0.06	0.27	0.47	1.19	0.16	0.09	4.59	0.25	0.10	0.17	1.65	0.57	0.64	0.135	23500	58940	0.00353	0.132
2726-RU-120522-02-07	0.92	0.12	0.05	0.03	0.23	0.40	1.04	0.14	0.08	4.50	0.25	0.09	0.14	1.68	0.55	0.64	0.069	23500	58720	0.00351	0.067
2726-RU-120522-02-08	0.82	0.12	0.05	-0.02	0.23	0.40	1.04	0.16	0.08	4.00	0.22	0.10	0.14	1.73	0.67	0.72	0.055	23500	57100	0.00335	0.051
2753-RU-120529-01-01	0.94	0.12	0.05	-0.01	0.29	0.51	1.10	0.14	0.09	2.33	0.12	0.10	0.17	1.59	0.52	0.60	0.095	25780	69500	0.00436	0.113
2753-RU-120529-01-02	0.88	0.11	0.05	-0.23	0.29	0.53	1.08	0.14	0.09	2.11	0.11	0.10	0.15	1.30	0.44	0.55	0.061	25780	67340	0.00414	0.069
2753-RU-120529-01-03	1.03	0.14	0.06	0.03	0.26	0.44	1.00	0.15	0.10	6.53	0.36	0.16	0.17	1.53	0.50	0.62	0.119	25780	68760	0.00428	0.140
2753-RU-120529-01-04	0.93	0.12	0.05	0.08	0.31	0.53	1.11	0.14	0.09	6.88	0.38	0.14	0.16	1.36	0.50	0.59	0.125	25780	70300	0.00444	0.152
2753-RU-120529-01-05	0.74	0.10	0.04	-0.04	0.26	0.46	1.01	0.13	0.07	1.85	0.09	0.09	0.11	1.56	0.44	0.52	0.025	25780	70320	0.00444	0.031
2753-RU-120529-02-01	0.83	0.12	0.06	-0.05	0.28	0.49	1.04	0.15	0.10	3.55	0.19	0.09	0.14	1.54	0.52	0.64	0.051	23500	60920	0.00373	0.052
2753-RU-120529-02-02	0.77	0.11	0.05	0.70	0.34	0.51	1.00	0.13	0.07	7.42	0.41	0.10	0.12	1.40	0.42	0.52	0.082	23500	61600	0.00380	0.086
2753-RU-120529-02-03	0.83	0.11	0.05	-0.28	0.26	0.47	1.02	0.14	0.08	4.53	0.25	0.10	0.15	0.88	0.24	0.54	0.043	23500	60220	0.00366	0.043
2753-RU-120529-02-04	0.82	0.11	0.04	-0.07	0.24	0.43	1.04	0.13	0.08	4.07	0.22	0.10	0.13	1.61	0.47	0.55	0.055	23500	62280	0.00386	0.058
2753-RU-120529-02-05	0.70	0.10	0.05	-0.05	0.30	0.53	0.81	0.11	0.07	4.47	0.24	0.08	0.10	1.52	0.48	0.53	0.037	23500	60680	0.00370	0.037
2758-RU-120529-02-06	0.71	0.11	0.05	-0.10	0.33	0.58	1.09	0.15	0.08	4.02	0.22	0.10	0.14	1.25	0.53	0.65	0.077	23500	62260	0.00386	0.082
2759-RU-120530-01-01	0.87	0.11	0.04	-0.08	0.27	0.48	1.06	0.14	0.08	3.41	0.18	0.08	0.11	1.41	0.53	0.60	0.059	25780	66320	0.00404	0.066
2759-RU-120530-01-02	0.76	0.10	0.05	-0.12	0.30	0.54	1.01	0.13	0.07	5.23	0.29	0.09	0.11	1.60	0.42	0.50	0.047	25780	68560	0.00426	0.055
2759-RU-120530-02-01	0.83	0.11	0.05	-0.05	0.32	0.56	1.22	0.17	0.07	5.47	0.30	0.10	0.14	1.79	0.58	0.65	0.154	23500	60760	0.00371	0.158
2760-RU-120530-01-03	0.83	0.12	0.06	0.17	0.27	0.45	0.99	0.15	0.10	4.74	0.26	0.10	0.14	1.40	0.31	0.73	0.044	25780	65400	0.00395	0.048
2760-RU-120530-01-04	0.88	0.11	0.05	0.25	0.27	0.44	1.07	0.14	0.08	7.42	0.41	0.12	0.15	1.53	0.56	0.64	0.100	25780	69800	0.00439	0.121
2760-RU-120530-01-05	0.91	0.12	0.05	0.44	0.29	0.45	1.01	0.13	0.07	6.21	0.34	0.10	0.13	1.94	0.52	0.59	0.078	25780	71180	0.00452	0.097
2760-RU-120530-01-06	0.81	0.11	0.06	0.69	0.28	0.40	0.97	0.16	0.09	6.56	0.36	0.15	0.17	2.01	0.62	0.68	0.080	25780	66700	0.00408	0.090
2760-RU-120530-01-07	0.81	0.10	0.05	1.46	0.36	0.42	1.08	0.13	0.07	9.78	0.54	0.11	0.13	2.02	0.48	0.53	0.171	25780	71880	0.00459	0.216
2760-RU-120530-02-02	0.74	0.09	0.03	0.84	0.33	0.46	0.88	0.11	0.07	3.47	0.19	0.07	0.11	1.58	0.45	0.52	0.064	23500	58920	0.00353	0.062
2760-RU-120530-02-03	0.76	0.10	0.04	0.25	0.28	0.46	0.98	0.14	0.06	6.90	0.38	0.12	0.13	1.00	0.24	0.54	0.059	23500	62180	0.00385	0.062
2760-RU-120530-02-04	0.77	0.10	0.05	0.11	0.25	0.43	0.93	0.14	0.07	6.34	0.35	0.10	0.14	1.05	0.27	0.62	0.050	23500	61240	0.00376	0.052
2760-RU-120530-02-05	0.89	0.11	0.05	0.28	0.27	0.44	1.36	0.20	0.09	7.29	0.40	0.13	0.15	2.18	0.65	0.68	0.249	23500	61440	0.00378	0.259
2760-RU-120530-02-06	0.75	0.09	0.04	1.00	0.33	0.43	1.00	0.13	0.08	10.86	0.60	0.13	0.15	2.12	0.53	0.59	0.120	23500	60260	0.00366	0.120

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 28 of 65				
	Revision 1																					
Attachment 1 Reuse Stockpile 1 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Result	Result	Error	MDC	Result	Error	MDC						
2772-RU-120530-02-07	0.82	0.11	0.06	0.89	0.30	0.41	1.00	0.15	0.11	5.99	0.33	0.12	0.15	1.48	0.55	0.66	0.081	23500	62200	0.00386	0.086	
2773-RU-120531-01-01	0.87	0.11	0.04	0.79	0.32	0.45	0.96	0.13	0.07	8.51	0.47	0.13	0.15	1.64	0.51	0.59	0.094	25780	67680	0.00418	0.108	
2773-RU-120531-01-02	0.82	0.11	0.05	0.67	0.31	0.46	1.06	0.14	0.08	4.38	0.24	0.11	0.15	1.30	0.43	0.55	0.091	25780	69360	0.00434	0.109	
2773-RU-120531-01-03	0.79	0.11	0.06	0.06	0.24	0.42	0.99	0.15	0.09	3.70	0.20	0.11	0.15	1.47	0.56	0.66	0.034	25780	68280	0.00423	0.039	
2773-RU-120531-02-01	0.82	0.11	0.04	0.56	0.30	0.46	1.00	0.13	0.08	5.09	0.28	0.11	0.12	1.32	0.36	0.45	0.062	23500	59920	0.00363	0.061	
2773-RU-120531-02-02	0.78	0.10	0.04	0.32	0.28	0.44	1.03	0.14	0.07	4.91	0.27	0.12	0.14	1.38	0.45	0.56	0.066	23500	59020	0.00354	0.065	
2773-RU-120531-02-03	0.89	0.12	0.05	0.34	0.28	0.45	1.08	0.14	0.09	3.32	0.18	0.10	0.13	1.78	0.50	0.58	0.084	23500	58280	0.00347	0.081	
2773-RU-120531-02-04	0.81	0.10	0.05	-0.01	0.24	0.42	1.09	0.14	0.09	1.88	0.10	0.10	0.17	1.32	0.47	0.57	0.064	23500	61260	0.00376	0.067	
2795-RU-120604-01-01	0.78	0.11	0.05	0.13	0.26	0.43	1.07	0.15	0.09	5.84	0.32	0.11	0.13	1.81	0.52	0.60	0.087	25780	64700	0.00388	0.093	
2795-RU-120604-01-02	0.79	0.11	0.05	0.78	0.34	0.50	1.02	0.13	0.07	8.36	0.46	0.10	0.13	2.24	0.62	0.64	0.106	25780	66160	0.00402	0.117	
2795-RU-120604-01-03	0.83	0.11	0.05	2.97	0.53	0.51	1.03	0.15	0.08	9.09	0.50	0.13	0.16	2.45	0.65	0.66	0.204	25780	64420	0.00385	0.216	
2795-RU-120604-01-04	0.75	0.10	0.04	0.22	0.29	0.49	1.01	0.13	0.08	6.52	0.36	0.13	0.16	1.44	0.55	0.64	0.063	25780	65400	0.00395	0.068	
2795-RU-120604-02-01	0.76	0.10	0.04	0.35	0.33	0.55	1.06	0.13	0.07	4.37	0.24	0.12	0.15	1.28	0.28	0.64	0.079	23500	61320	0.00377	0.081	
2795-RU-120604-02-02	0.75	0.10	0.04	0.47	0.30	0.47	0.97	0.13	0.07	8.63	0.48	0.10	0.12	2.10	0.51	0.56	0.085	23500	61400	0.00378	0.088	
2795-RU-120604-02-03	0.81	0.11	0.04	0.75	0.33	0.49	1.01	0.15	0.07	14.32	0.79	0.14	0.13	2.26	0.56	0.60	0.137	23500	60080	0.00365	0.137	
2795-RU-120604-02-04	1.01	0.14	0.07	0.41	0.29	0.47	0.95	0.14	0.09	182.21	8.38	0.93	0.39	2.87	0.82	0.93	1.186	23500	61580	0.00379	1.238	
2796-RU-120604-01-05	0.86	0.11	0.05	0.00	0.27	0.47	0.96	0.14	0.09	3.48	0.19	0.10	0.13	1.37	0.48	0.58	0.030	25780	67320	0.00414	0.034	
2796-RU-120604-01-06	1.35	0.16	0.05	0.46	0.31	0.48	1.18	0.15	0.08	5.83	0.32	0.11	0.15	1.69	0.53	0.62	0.391	25780	64900	0.00390	0.419	
2796-RU-120604-01-07	0.97	0.12	0.05	0.44	0.28	0.43	0.98	0.14	0.11	2.73	0.14	0.10	0.15	1.80	0.61	0.68	0.082	25780	65020	0.00391	0.088	
2796-RU-120604-01-08	1.03	0.14	0.06	-0.17	0.28	0.51	1.07	0.15	0.08	2.58	0.14	0.11	0.19	1.00	0.26	0.60	0.125	25780	63040	0.00371	0.128	
2796-RU-120604-01-09	0.95	0.12	0.04	0.20	0.27	0.44	1.15	0.16	0.09	1.39	0.07	0.10	0.16	1.18	0.37	0.50	0.125	25780	60800	0.00349	0.120	
2796-RU-120604-02-05	0.88	0.13	0.06	0.14	0.28	0.47	0.94	0.13	0.08	4.89	0.27	0.12	0.15	1.15	0.47	0.59	0.043	23500	60920	0.00373	0.044	
2796-RU-120604-02-06	1.00	0.12	0.04	0.24	0.29	0.48	1.07	0.14	0.07	6.62	0.36	0.10	0.13	1.83	0.47	0.55	0.149	23500	60880	0.00372	0.153	
2796-RU-120604-02-07	0.95	0.12	0.04	0.49	0.31	0.48	1.01	0.13	0.07	5.85	0.32	0.10	0.12	1.87	0.52	0.58	0.098	23500	57780	0.00342	0.092	
2796-RU-120604-02-08	0.97	0.13	0.05	-0.05	0.26	0.46	0.60	0.11	0.21	2.14	0.11	0.08	0.13	1.57	0.33	0.67	0.059	23500	56000	0.00324	0.053	
2806-RU-120605-01-01	0.83	0.11	0.05	0.28	0.28	0.45	1.15	0.15	0.07	4.57	0.25	0.12	0.13	1.46	0.48	0.57	0.123	25780	64520	0.00386	0.131	
2806-RU-120605-01-02	0.77	0.10	0.04	0.16	0.29	0.49	1.12	0.15	0.06	1.43	0.07	0.09	0.14	1.04	0.40	0.50	0.081	25780	64640	0.00387	0.087	
2806-RU-120605-01-03	0.80	0.11	0.05	0.12	0.28	0.47	1.17	0.16	0.08	2.64	0.14	0.12	0.17	1.38	0.54	0.64	0.114	25780	62920	0.00370	0.116	
2806-RU-120605-01-04	0.82	0.11	0.05	0.10	0.28	0.48	1.20	0.14	0.07	2.83	0.15	0.10	0.13	1.53	0.53	0.62	0.130	25780	61780	0.00359	0.129	
2806-RU-120605-01-05	0.84	0.12	0.05	0.25	0.28	0.46	1.12	0.16	0.09	2.91	0.16	0.09	0.13	1.20	0.50	0.63	0.095	25780	62980	0.00371	0.097	
2808-RU-120605-01-06	0.87	0.11	0.04	0.34	0.30	0.49	1.06	0.13	0.08	3.26	0.17	0.10	0.11	1.81	0.50	0.57	0.074	25780	53300	0.00274	0.056	
2838-RU-120611-01-01	0.78	0.10	0.04	-0.03	0.25	0.44	1.05	0.13	0.08	2.33	0.12	0.09	0.12	1.44	0.50	0.59	0.048	25780	64220	0.00383	0.050	
2838-RU-120611-01-02	0.80	0.11	0.05	-0.08	0.26	0.45	1.02	0.14	0.10	2.27	0.12	0.10	0.16	1.30	0.43	0.55	0.032	25780	63160	0.00372	0.032	

Attachment 1
Reuse Stockpile 1 Sample Data and Calculated SOF Values

Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Result	Result	Error	MDC	Result	Error	MDC					
2838-RU-120611-01-03	0.79	0.11	0.06	0.36	0.27	0.43	1.00	0.14	0.10	2.80	0.15	0.11	0.19	1.28	0.48	0.60	0.039	25780	63220	0.00373	0.040
2838-RU-120611-02-01	0.78	0.10	0.05	0.11	0.24	0.40	1.03	0.14	0.09	1.80	0.09	0.07	0.11	1.23	0.44	0.55	0.038	23500	58440	0.00348	0.036
2838-RU-120611-02-02	0.82	0.11	0.05	0.03	0.25	0.43	0.55	0.13	0.18	3.94	0.21	0.13	0.16	1.98	0.56	0.63	0.037	23500	56720	0.00331	0.034
2838-RU-120611-02-03	0.76	0.11	0.05	0.40	0.29	0.45	0.99	0.14	0.11	6.34	0.35	0.13	0.17	1.32	0.59	0.71	0.063	23500	56480	0.00329	0.057
2846-RU-120612-01-01	0.88	0.13	0.07	0.20	0.26	0.43	1.00	0.14	0.10	2.31	0.12	0.12	0.18	1.49	0.43	0.61	0.031	25780	63380	0.00375	0.032
2846-RU-120612-01-02	0.81	0.10	0.05	0.19	0.26	0.44	0.93	0.12	0.08	6.19	0.34	0.11	0.13	1.82	0.47	0.53	0.057	25780	67840	0.00419	0.065
2846-RU-120612-01-03	0.86	0.11	0.04	0.35	0.27	0.43	0.94	0.12	0.09	7.97	0.44	0.13	0.15	1.78	0.54	0.64	0.074	25780	64100	0.00382	0.078
2846-RU-120612-01-04	0.83	0.10	0.04	0.19	0.28	0.47	1.00	0.14	0.07	4.20	0.23	0.10	0.12	1.33	0.45	0.55	0.041	25780	62460	0.00365	0.042
2846-RU-120612-01-05	0.79	0.11	0.05	0.19	0.26	0.44	1.05	0.14	0.08	4.14	0.23	0.09	0.12	1.42	0.48	0.58	0.067	25780	66540	0.00406	0.074
2846-RU-120612-02-01	0.81	0.11	0.05	0.21	0.27	0.45	1.09	0.15	0.09	4.21	0.23	0.11	0.15	1.40	0.60	0.70	0.088	23500	53860	0.00303	0.073
2846-RU-120612-02-02	0.69	0.09	0.04	-0.04	0.27	0.47	0.95	0.12	0.07	4.95	0.27	0.09	0.12	1.34	0.40	0.51	0.039	23500	58800	0.00352	0.037
2846-RU-120612-02-03	0.90	0.12	0.05	0.18	0.26	0.42	1.06	0.14	0.09	10.17	0.56	0.13	0.13	2.65	0.60	0.64	0.116	23500	60120	0.00365	0.116
2846-RU-120612-02-04	0.87	0.13	0.07	0.14	0.28	0.47	1.04	0.15	0.13	4.21	0.23	0.13	0.15	1.40	0.57	0.70	0.060	23500	60360	0.00367	0.060
2846-RU-120612-02-05	0.88	0.11	0.05	0.24	0.28	0.46	1.10	0.14	0.08	4.59	0.25	0.12	0.15	1.59	0.52	0.62	0.097	23500	59880	0.00363	0.097
2846-RU-120612-02-06	0.83	0.11	0.05	0.42	0.30	0.47	1.03	0.15	0.07	3.36	0.18	0.09	0.13	1.60	0.51	0.62	0.062	23500	57520	0.00339	0.058
2849-RU-120612-01-06	0.88	0.13	0.06	-0.05	0.24	0.42	1.23	0.19	0.10	5.98	0.33	0.14	0.17	1.43	0.40	0.92	0.160	25780	65780	0.00399	0.176
2849-RU-120612-01-07	0.89	0.13	0.06	0.16	0.25	0.41	1.01	0.15	0.10	4.37*	0.34	0.16	0.19	1.31	0.18	0.02	0.043	25780	66540	0.00406	0.048
2849-RU-120612-01-08	0.89	0.14	0.07	0.11	0.26	0.44	1.04	0.18	0.10	4.89	0.27	0.15	0.21	0.93	0.35	0.84	0.060	25780	66250	0.00403	0.067
2849-RU-120612-01-09	0.77	0.13	0.06	0.07	0.23	0.39	1.15	0.19	0.11	3.96	0.21	0.16	0.21	2.14	0.88	0.98	0.115	25780	63040	0.00371	0.117
2849-RU-120612-02-07	0.94	0.13	0.06	0.09	0.25	0.43	1.10	0.16	0.10	6.04	0.33	0.12	0.16	2.07	0.72	0.83	0.124	23500	56200	0.00326	0.111
2849-RU-120612-02-08	0.97	0.17	0.09	0.32	0.28	0.45	1.08	0.18	0.09	5.11	0.28	0.14	0.21	1.56	0.80	0.96	0.130	23500	57660	0.00340	0.122
2849-RU-120612-02-09	0.97	0.15	0.07	0.14	0.26	0.44	1.34	0.23	0.11	2.83	0.15	0.15	0.27	1.50	0.70	0.88	0.239	23500	57920	0.00343	0.225
2880-RU-120618-01-01	1.01	0.14	0.07	-0.13	0.29	0.51	0.98	0.15	0.12	5.65	0.31	0.11	0.16	1.69	0.58	0.69	0.103	25780	63100	0.00372	0.105
2880-RU-120618-01-02	1.00	0.14	0.06	0.22	0.34	0.56	1.25	0.17	0.10	5.33	0.29	0.13	0.16	1.92	0.68	0.76	0.231	25780	66780	0.00409	0.259
2880-RU-120618-01-03	0.92	0.14	0.07	-0.17	0.27	0.49	1.11	0.17	0.13	2.69	0.14	0.12	0.17	1.75	0.66	0.78	0.092	25780	63260	0.00373	0.095
2880-RU-120618-01-04	0.98	0.13	0.05	0.01	0.32	0.55	1.17	0.16	0.09	3.05	0.16	0.10	0.13	1.36	0.49	0.64	0.154	25780	60040	0.00341	0.145
2880-RU-120618-01-05	0.95	0.13	0.05	-0.21	0.31	0.55	1.16	0.15	0.07	1.82	0.09	0.10	0.15	1.22	0.51	0.65	0.125	25780	64800	0.00389	0.133
2880-RU-120618-02-01	0.98	0.12	0.04	-0.06	0.27	0.48	1.00	0.13	0.09	5.34	0.29	0.11	0.14	2.08	0.59	0.64	0.087	23500	54440	0.00308	0.074
2880-RU-120618-02-02	0.96	0.14	0.06	-0.25	0.26	0.47	1.26	0.17	0.09	4.17	0.23	0.16	0.19	1.02	0.29	0.69	0.193	23500	55440	0.00318	0.169
2880-RU-120618-02-03	1.04	0.14	0.07	-0.05	0.29	0.51	1.30	0.18	0.10	2.98	0.16	0.09	0.14	1.52	0.73	0.82	0.251	23500	56280	0.00327	0.225
2880-RU-120618-02-04	0.91	0.12	0.05	-0.01	0.31	0.54	1.16	0.15	0.11	1.38	0.07	0.10	0.16	1.18	0.42	0.56	0.101	23500	56740	0.00331	0.092
2880-RU-120618-02-05	0.88	0.12	0.06	-0.04	0.34	0.60	1.18	0.16	0.10	2.78	0.15	0.10	0.14	1.17	0.50	0.65	0.114	23500	55280	0.00317	0.099
2881-RU-120618-01-06	0.76	0.12	0.06	-0.10	0.30	0.53	1.22	0.20	0.10	1.89	0.10	0.12	0.19	1.04	0.29	0.67	0.128	25780	65260	0.00393	0.138

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 30 of 65				
	Revision 1																					
Attachment 1 Reuse Stockpile 1 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g Inferred Result	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC		Result	Error	MDC	Result	Error	MDC						
2881-RU-120618-01-07	0.93	0.11	0.04	-0.04	0.31	0.54	1.11	0.14	0.07	5.34	0.29	0.10	0.13	1.76	0.54	0.60	0.114	25780	60160	0.00343	0.108	
2881-RU-120618-01-08	0.55	0.08	0.04	-0.25	0.28	0.50	0.90	0.12	0.06	2.89	0.16	0.07	0.10	1.11	0.36	0.45	0.024	25780	61720	0.00358	0.024	
2881-RU-120618-01-09	0.68	0.09	0.05	0.07	0.30	0.51	0.99	0.13	0.07	3.11	0.17	0.11	0.13	1.06	0.25	0.53	0.028	25780	64940	0.00390	0.030	
2881-RU-120618-01-10	0.74	0.10	0.05	-0.09	0.31	0.55	1.15	0.16	0.08	4.02	0.22	0.11	0.14	1.31	0.47	0.59	0.108	25780	63800	0.00379	0.112	
2881-RU-120618-01-11	0.72	0.11	0.06	0.52	0.39	0.62	0.97	0.13	0.09	4.60	0.25	0.14	0.16	1.72	0.59	0.69	0.059	25780	57620	0.00317	0.052	
2881-RU-120618-02-06	0.72	0.10	0.05	0.05	0.38	0.65	1.05	0.14	0.09	5.85	0.32	0.12	0.14	1.91	0.55	0.60	0.074	23500	57440	0.00338	0.069	
2881-RU-120618-02-07	0.67	0.09	0.04	-0.04	0.30	0.52	1.06	0.14	0.07	4.18	0.23	0.10	0.13	1.10	0.25	0.58	0.062	23500	54760	0.00311	0.053	
2881-RU-120618-02-08	0.72	0.10	0.05	-0.08	0.26	0.45	0.99	0.13	0.07	7.59	0.42	0.10	0.13	1.99	0.56	0.63	0.059	23500	57920	0.00343	0.055	
2881-RU-120618-02-09	0.78	0.12	0.06	-0.26	0.37	0.67	1.04	0.15	0.09	1.92	0.10	0.11	0.18	1.28	0.52	0.65	0.039	23500	57660	0.00340	0.037	
2881-RU-120618-02-10	0.73	0.09	0.04	0.30	0.38	0.62	1.00	0.13	0.07	4.40	0.24	0.13	0.15	1.56	0.53	0.62	0.048	23500	55320	0.00317	0.042	
2889-RU-120619-02-01	0.82	0.11	0.05	0.04	0.34	0.58	1.00	0.14	0.09	4.36	0.24	0.11	0.14	1.13	0.26	0.59	0.035	23500	56120	0.00325	0.032	
2889-RU-120619-02-02	0.77	0.10	0.05	0.01	0.31	0.54	1.04	0.13	0.07	7.43	0.41	0.12	0.13	1.70	0.43	0.52	0.076	23500	56820	0.00332	0.070	
2889-RU-120619-02-03	0.80	0.11	0.06	0.18	0.32	0.54	1.01	0.13	0.08	7.51	0.41	0.10	0.12	2.02	0.56	0.63	0.071	23500	57000	0.00334	0.065	
2889-RU-120619-02-04	0.77	0.11	0.06	-0.01	0.28	0.49	0.87	0.14	0.11	9.60	0.53	0.12	0.15	1.82	0.67	0.75	0.070	23500	55780	0.00322	0.062	
2889-RU-120619-02-05	0.93	0.11	0.04	0.16	0.40	0.67	1.02	0.13	0.09	6.60	0.36	0.09	0.13	1.56	0.49	0.57	0.082	23500	58220	0.00346	0.078	
2889-RU-120619-02-06	0.75	0.10	0.04	0.15	0.33	0.55	1.01	0.13	0.07	6.34	0.35	0.12	0.14	1.25	0.25	0.53	0.058	23500	57740	0.00341	0.054	
2922-RU-120625-01-01	1.13	0.19	0.11	-0.03	0.28	0.49	1.17	0.22	0.19	8.52	0.47	0.21	0.32	2.00	1.30	1.70	0.271	25780	65920	0.00400	0.298	
2922-RU-120625-01-02	1.01	0.19	0.14	0.13	0.28	0.47	1.22	0.23	0.21	4.74	0.26	0.22	0.35	1.43	0.60	1.60	0.211	25780	64980	0.00391	0.226	
2922-RU-120625-01-03	1.16	0.21	0.14	-0.08	0.28	0.48	1.18	0.22	0.18	8.71	0.48	0.27	0.43	1.28	0.66	1.80	0.288	25780	64840	0.00389	0.309	
2922-RU-120625-01-04	1.07	0.19	0.12	-0.05	0.29	0.50	1.13	0.22	0.17	2.80	0.15	0.20	0.44	1.34	0.55	1.60	0.180	25780	64860	0.00389	0.192	
2922-RU-120625-01-05	1.07	0.20	0.12	-0.11	0.28	0.49	1.12	0.28	0.20	4.24	0.23	0.25	0.41	1.60	1.10	1.60	0.185	25780	62800	0.00369	0.188	
2930-RU-120626-01-01	0.98	0.14	0.06	0.10	0.29	0.49	1.05	0.16	0.11	3.89	0.21	0.14	0.19	1.68	0.59	0.74	0.105	25780	63920	0.00380	0.110	
2930-RU-120626-01-02	0.87	0.13	0.06	0.31	0.28	0.45	1.15	0.17	0.10	2.76	0.15	0.15	0.25	1.07	0.37	0.92	0.111	25780	63600	0.00377	0.115	
2930-RU-120626-01-03	0.82	0.14	0.08	0.25	0.29	0.47	1.20	0.18	0.09	5.08	0.28	0.13	0.20	1.23	0.35	0.78	0.149	25780	64060	0.00381	0.156	
2930-RU-120626-01-04	0.79	0.11	0.06	0.04	0.26	0.46	1.05	0.16	0.10	5.46	0.30	0.17	0.18	1.61	0.64	0.76	0.070	25780	64820	0.00389	0.075	
2930-RU-120626-01-05	0.86	0.14	0.07	0.27	0.27	0.43	1.10	0.19	0.10	4.78	0.26	0.16	0.23	1.77	0.79	0.94	0.101	25780	65260	0.00393	0.109	
2930-RU-120626-01-06	0.80	0.12	0.06	-0.14	0.26	0.47	0.89	0.15	0.11	4.71	0.26	0.12	0.17	0.88	0.33	0.81	0.034	25780	64320	0.00384	0.036	
2930-RU-120626-02-01	1.09	0.16	0.07	0.08	0.27	0.46	1.18	0.17	0.11	3.88	0.21	0.13	0.19	1.59	0.74	0.88	0.227	23500	54500	0.00309	0.192	
2930-RU-120626-02-02	0.75	0.12	0.06	0.23	0.28	0.47	1.01	0.15	0.08	3.90	0.21	0.15	0.21	1.74	0.78	0.91	0.049	23500	58220	0.00346	0.046	
2930-RU-120626-02-03	0.79	0.13	0.07	0.10	0.25	0.42	0.96	0.16	0.09	4.19	0.23	0.12	0.18	1.16	0.33	0.77	0.037	23500	57880	0.00343	0.035	
2930-RU-120626-02-04	0.80	0.12	0.06	0.19	0.27	0.44	1.07	0.16	0.09	5.28	0.29	0.12	0.19	1.49	0.65	0.79	0.084	23500	56900	0.00333	0.077	
2930-RU-120626-02-05	0.82	0.12	0.06	0.25	0.27	0.45	1.11	0.18	0.12	5.33	0.29	0.12	0.17	1.94	0.67	0.82	0.109	23500	57800	0.00342	0.103	
2932-RU-120626-01-07	0.79	0.14	0.08	0.45	0.31	0.49	1.11	0.18	0.12	4.82	0.26	0.16	0.22	2.05	0.81	0.97	0.115	25780	65240	0.00393	0.124	

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 31 of 65				
	Revision 1																					
Attachment 1 Reuse Stockpile 1 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Result	Result	Error	MDC	Result	Error	MDC						
2932-RU-120626-01-08	0.99	0.14	0.07	0.21	0.28	0.46	1.06	0.15	0.11	4.37	0.24	0.14	0.23	1.24	0.36	0.82	0.120	25780	63780	0.00379	0.125	
2932-RU-120626-01-09	0.87	0.13	0.07	-0.04	0.27	0.48	1.05	0.16	0.13	3.10	0.17	0.12	0.17	0.97	0.35	0.88	0.050	25780	63680	0.00378	0.052	
2932-RU-120626-01-10	0.93	0.13	0.06	-0.07	0.31	0.55	1.11	0.16	0.11	6.19	0.34	0.19	0.21	1.83	0.65	0.78	0.120	25780	63080	0.00372	0.123	
2932-RU-120626-01-11	0.90	0.13	0.07	-0.09	0.30	0.54	1.02	0.16	0.12	6.19	0.34	0.19	0.21	1.74	0.70	0.84	0.059	25780	64300	0.00384	0.062	
2932-RU-120626-02-06	0.91	0.15	0.08	0.19	0.28	0.48	1.05	0.16	0.10	5.15	0.28	0.15	0.20	1.91	0.67	0.82	0.081	23500	57440	0.00338	0.075	
2932-RU-120626-02-07	1.00	0.15	0.06	0.03	0.26	0.45	0.93	0.16	0.12	6.63	0.36	0.13	0.17	2.55	0.75	0.89	0.110	23500	56340	0.00327	0.099	
2932-RU-120626-02-08	0.83	0.12	0.05	0.26	0.32	0.53	1.00	0.15	0.09	7.09	0.39	0.16	0.19	0.94	0.32	0.80	0.060	23500	56580	0.00330	0.054	
2932-RU-120626-02-09	0.86	0.16	0.10	-0.02	0.27	0.46	1.05	0.18	0.13	5.62	0.31	0.19	0.23	1.38	0.75	0.98	0.068	23500	56020	0.00324	0.061	
2932-RU-120626-02-10	0.92	0.14	0.08	0.14	0.26	0.43	1.29	0.18	0.11	2.65	0.14	0.15	0.26	1.52	0.79	0.94	0.186	23500	57560	0.00339	0.174	
2946-RU-120703-01-01	0.98	0.14	0.07	-0.16	0.28	0.50	1.04	0.16	0.11	5.11	0.28	0.14	0.18	1.58	0.73	0.90	0.103	25780	63720	0.00378	0.107	
2946-RU-120703-01-02	0.84	0.14	0.09	-0.07	0.31	0.55	1.05	0.18	0.12	2.46	0.13	0.16	0.27	1.33	0.72	0.93	0.048	25780	64660	0.00387	0.051	
2946-RU-120703-01-03	0.83	0.13	0.07	0.07	0.30	0.51	1.20	0.18	0.10	5.07	0.28	0.12	0.17	0.92	0.35	0.84	0.140	25780	63440	0.00375	0.144	
2946-RU-120703-01-04	0.85	0.13	0.08	0.02	0.28	0.50	1.15	0.17	0.12	4.20	0.23	0.12	0.20	1.30	0.57	0.78	0.109	25780	64340	0.00384	0.116	
2946-RU-120703-02-01	0.77	0.12	0.06	0.11	0.30	0.51	1.06	0.15	0.13	5.62	0.31	0.13	0.21	1.30	0.35	0.78	0.077	23500	57060	0.00334	0.071	
2946-RU-120703-02-02	0.79	0.12	0.06	0.00	0.27	0.47	1.04	0.16	0.08	6.44	0.35	0.16	0.20	2.37	0.69	0.77	0.074	23500	56660	0.00330	0.067	
2946-RU-120703-02-03	0.87	0.13	0.08	0.10	0.30	0.51	1.15	0.17	0.13	2.65	0.14	0.16	0.26	1.47	0.80	0.97	0.104	23500	55940	0.00323	0.092	
2946-RU-120703-02-04	0.93	0.14	0.07	-0.23	0.29	0.53	1.18	0.20	0.12	3.19	0.17	0.16	0.26	1.55	0.75	0.90	0.135	23500	56720	0.00331	0.123	
2958-RU-120704-01-01	0.82	0.12	0.08	-0.15	0.37	0.66	1.10	0.16	0.12	3.17	0.17	0.16	0.20	1.48	0.74	0.88	0.078	25780	61000	0.00351	0.076	
2958-RU-120704-02-01	1.01	0.15	0.07	-0.11	0.33	0.59	1.00	0.16	0.11	2.46	0.13	0.16	0.24	1.40	0.64	0.82	0.081	23580	55600	0.00319	0.071	
2958-RU-120704-02-02	0.89	0.14	0.07	-0.21	0.29	0.52	1.03	0.18	0.13	1.99	0.10	0.17	0.27	1.66	0.73	0.89	0.037	23580	56080	0.00324	0.033	
2958-RU-120704-02-03	0.97	0.14	0.06	0.15	0.28	0.47	1.20	0.20	0.11	15.39	0.84	0.17	0.20	1.59	0.66	0.82	0.247	23580	57900	0.00342	0.233	
2958-RU-120704-02-04	0.70	0.10	0.06	0.03	0.28	0.48	1.00	0.15	0.09	5.64	0.31	0.12	0.16	1.51	0.62	0.74	0.045	23580	55160	0.00315	0.039	
2958-RU-120704-02-05	1.06	0.16	0.08	-0.07	0.31	0.54	1.13	0.17	0.12	9.25	0.51	0.15	0.21	2.24	0.81	0.94	0.220	23580	57800	0.00341	0.206	
2960-RU-120704-02-06	0.91	0.15	0.08	0.05	0.27	0.45	0.97	0.16	0.14	4.43	0.24	0.18	0.25	1.76	0.73	0.88	0.045	23580	58040	0.00343	0.043	
2960-RU-120704-02-07	0.99	0.14	0.06	0.05	0.32	0.54	1.25	0.22	0.12	7.46	0.41	0.15	0.19	2.13	0.58	0.81	0.233	23580	56080	0.00324	0.208	
2960-RU-120704-02-08	0.99	0.14	0.06	0.26	0.28	0.46	1.15	0.19	0.11	5.56	0.30	0.15	0.19	2.39	0.85	0.96	0.181	23580	57000	0.00333	0.166	
2988-RU-120709-02-01	1.03	0.15	0.07	0.09	0.26	0.44	1.17	0.18	0.15	2.42	0.13	0.11	0.19	1.06	0.37	0.96	0.178	23500	57300	0.00337	0.165	
2988-RU-120709-02-02	0.88	0.13	0.07	-0.33	0.34	0.63	1.05	0.16	0.07	2.93	0.16	0.15	0.24	1.00	0.35	0.87	0.049	23500	56560	0.00329	0.044	
2988-RU-120709-02-03	0.86	0.13	0.06	0.20	0.29	0.47	1.09	0.15	0.10	7.09	0.39	0.17	0.22	1.96	0.76	0.90	0.108	23500	55700	0.00321	0.096	
2988-RU-120709-02-04	0.86	0.14	0.07	-0.13	0.26	0.46	1.16	0.20	0.11	3.33	0.18	0.13	0.18	1.32	0.36	0.85	0.108	23500	58640	0.00350	0.104	
2988-RU-120709-02-05	0.90	0.14	0.05	0.14	0.27	0.46	0.88	0.17	0.12	4.96	0.27	0.18	0.21	1.84	0.74	0.87	0.047	23500	56240	0.00326	0.042	
2990-RU-120709-02-06	0.81	0.13	0.07	0.11	0.29	0.50	1.03	0.16	0.10	4.59	0.25	0.15	0.20	1.60	0.63	0.79	0.057	23500	53860	0.00303	0.048	
2990-RU-120709-02-07	0.72	0.12	0.07	-0.02	0.26	0.45	1.08	0.17	0.09	5.81	0.32	0.16	0.25	1.44	0.77	0.92	0.084	23500	54520	0.00309	0.072	

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 32 of 65				
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Attachment 1 Reuse Stockpile 1 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Inferred Result	Result	Error	MDC	Result	Error	MDC						
2990-RU-120709-02-08	0.94	0.13	0.06	-0.02	0.24	0.42	1.19	0.20	0.11	6.90	0.38	0.17	0.20	1.83	0.71	0.83	0.170	23500	56940	0.00333	0.155	
2990-RU-120709-02-09	0.79	0.12	0.06	-0.08	0.26	0.46	1.01	0.14	0.11	7.08	0.39	0.17	0.19	1.02	0.32	0.75	0.055	23500	55100	0.00315	0.047	
2990-RU-120709-02-10	0.88	0.15	0.09	-0.28	0.25	0.47	1.10	0.22	0.16	3.16	0.17	0.15	0.27	1.41	0.39	0.95	0.078	23500	53960	0.00304	0.065	
2990-RU-120709-02-11	0.78	0.12	0.06	-0.02	0.27	0.48	1.10	0.16	0.12	7.45	0.41	0.17	0.19	1.96	0.70	0.86	0.108	23500	56600	0.00330	0.098	
2997-RU-120710-01-01	1.03	0.14	0.06	-0.02	0.27	0.48	1.21	0.18	0.11	5.27	0.29	0.13	0.17	1.43	0.58	0.76	0.214	25780	62720	0.00368	0.217	
2997-RU-120710-01-02	0.87	0.13	0.05	-0.19	0.29	0.53	1.13	0.18	0.06	5.16	0.28	0.14	0.19	1.99	0.76	0.88	0.109	25780	64520	0.00386	0.115	
2997-RU-120710-01-03	0.87	0.12	0.05	-0.33	0.30	0.55	1.10	0.18	0.08	6.54	0.36	0.18	0.20	1.66	0.63	0.77	0.100	25780	65920	0.00400	0.110	
2997-RU-120710-01-04	0.87	0.13	0.06	-0.15	0.27	0.49	1.04	0.18	0.13	3.60	0.19	0.13	0.24	1.95	0.78	0.91	0.054	25780	64300	0.00384	0.057	
2997-RU-120710-01-05	0.95	0.15	0.07	-0.15	0.27	0.48	1.05	0.16	0.12	6.08	0.33	0.16	0.28	2.37	0.88	0.98	0.103	25780	65800	0.00399	0.113	
2997-RU-120710-01-06	0.91	0.14	0.08	-0.10	0.28	0.50	1.24	0.18	0.11	5.76	0.31	0.12	0.18	2.56	0.88	0.93	0.176	25780	66900	0.00410	0.198	
2997-RU-120710-02-01	0.94	0.14	0.06	-0.16	0.28	0.51	1.10	0.18	0.10	7.78	0.43	0.16	0.22	1.55	0.39	0.87	0.128	23500	56680	0.00331	0.117	
2997-RU-120710-02-02	0.87	0.13	0.07	-0.10	0.23	0.40	0.98	0.17	0.08	9.06	0.50	0.17	0.19	2.08	0.74	0.90	0.068	23500	55520	0.00319	0.060	
3024-RU-120716-02-01	0.74	0.11	0.06	0.09	0.25	0.42	0.99	0.15	0.11	5.99	0.33	0.16	0.19	1.52	0.36	0.78	0.050	23500	56780	0.00332	0.045	
3024-RU-120716-02-02	0.71	0.11	0.05	0.21	0.27	0.44	0.95	0.15	0.11	7.12	0.39	0.14	0.17	2.22	0.63	0.72	0.066	23500	56860	0.00332	0.060	
3024-RU-120716-02-03	0.83	0.12	0.05	-0.06	0.26	0.46	1.05	0.16	0.08	6.94	0.38	0.16	0.19	2.17	0.69	0.81	0.081	23500	58900	0.00353	0.078	
3024-RU-120716-02-04	0.77	0.11	0.05	-0.04	0.29	0.51	1.01	0.16	0.09	6.39	0.35	0.15	0.20	1.98	0.59	0.71	0.056	23500	57240	0.00336	0.052	
3024-RU-120716-02-05	0.81	0.11	0.05	-0.14	0.25	0.45	0.96	0.14	0.10	3.35	0.18	0.13	0.16	1.49	0.34	0.77	0.029	23500	58840	0.00352	0.029	
3024-RU-120716-02-06	0.83	0.14	0.08	0.03	0.27	0.46	1.08	0.18	0.14	3.11	0.17	0.16	0.24	1.00	0.37	0.91	0.066	23500	58380	0.00348	0.063	
3025-RU-120716-01-01	0.79	0.12	0.07	0.17	0.26	0.43	0.96	0.14	0.05	1.99	0.10	0.12	0.22	1.58	0.62	0.75	0.028	25780	63900	0.00380	0.029	
3025-RU-120716-02-07	0.70	0.10	0.04	15.90	1.70	0.50	0.85	0.13	0.09	18.01	0.99	0.19	0.18	2.33	0.69	0.78	0.759	23500	56840	0.00332	0.693	
3025-RU-120716-02-08	0.81	0.13	0.06	0.10	0.25	0.42	1.00	0.16	0.12	3.28	0.18	0.11	0.16	0.93	0.32	0.91	0.030	23500	55520	0.00319	0.026	
3025-RU-120716-02-09	0.75	0.13	0.07	0.13	0.24	0.40	1.02	0.16	0.08	3.71	0.20	0.10	0.16	1.46	0.74	0.92	0.047	23500	56100	0.00325	0.042	
3025-RU-120716-02-10	0.86	0.13	0.06	-0.05	0.26	0.46	1.10	0.15	0.10	5.28	0.29	0.13	0.16	1.55	0.66	0.82	0.092	23500	55180	0.00316	0.080	
3049-RU-120723-01-01	0.72	0.11	0.05	0.32	0.28	0.44	1.03	0.15	0.09	5.07	0.28	0.16	0.20	1.03	0.30	0.78	0.065	25780	64080	0.00382	0.068	
3049-RU-120723-01-02	0.78	0.12	0.06	0.10	0.24	0.40	1.07	0.17	0.10	8.70	0.48	0.16	0.19	1.44	0.36	0.80	0.101	25780	64800	0.00389	0.108	
3049-RU-120723-01-03	0.73	0.12	0.07	0.26	0.27	0.43	1.02	0.16	0.09	5.11	0.28	0.16	0.19	1.55	0.70	0.85	0.061	25780	65340	0.00394	0.066	
3049-RU-120723-01-04	0.74	0.12	0.07	0.28	0.25	0.40	0.98	0.19	0.11	4.76	0.26	0.12	0.19	1.64	0.59	0.77	0.050	25780	63160	0.00372	0.052	
3049-RU-120723-01-05	0.87	0.13	0.06	0.29	0.27	0.43	1.34	0.19	0.08	12.13	0.67	0.18	0.22	2.25	0.75	0.86	0.270	25780	61920	0.00360	0.267	
3049-RU-120723-01-06	0.78	0.13	0.08	0.17	0.26	0.43	1.14	0.19	0.13	11.51	0.63	0.21	0.23	1.29	0.39	0.91	0.156	25780	62680	0.00368	0.157	
3075-RU-120730-01-01	0.95	0.07	0.06	0.04	0.31	0.53	1.07	0.08	0.10	4.73	0.26	0.06	0.16	1.00	0.14	0.74	0.097	25780	61680	0.00358	0.095	
3075-RU-120730-01-02	0.99	0.08	0.09	-0.12	0.30	0.53	1.15	0.10	0.09	4.26	0.24	0.07	0.19	0.96	0.17	0.86	0.156	25780	63060	0.00371	0.159	
3075-RU-120730-01-03	0.79	0.06	0.05	-0.09	0.30	0.53	1.12	0.08	0.13	7.15	0.39	0.07	0.19	2.36	0.38	0.85	0.118	25780	62940	0.00370	0.120	
3075-RU-120730-01-04	0.84	0.06	0.05	-0.18	0.28	0.51	1.04	0.08	0.11	8.00	0.44	0.08	0.19	2.29	0.38	0.85	0.083	25780	63860	0.00379	0.087	

Attachment 1

1. * Isotopic analysis results, not inferred results.

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<div>Attachment 2</div> <div>Reuse Stockpile 2 Sample Data and Calculated SOF Values</div>		

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 35 of 65				
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Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC						
2319-RU-120320-01-01	0.67	0.11	0.07	0.62	0.35	0.54	0.87	0.14	0.09	7.98	0.44	0.14	0.18	1.93	0.67	0.77	0.085	25780	62900	0.00351	0.086	
2319-RU-120320-01-02	0.70	0.11	0.06	0.63	0.33	0.51	0.77	0.12	0.07	9.10	0.50	0.14	0.18	2.53	0.73	0.79	0.096	25780	60140	0.00325	0.090	
2319-RU-120320-01-03	0.51	0.08	0.05	0.35	0.33	0.53	0.63	0.10	0.07	4.24	0.23	0.09	0.12	0.96	0.26	0.57	0.046	25780	59680	0.00321	0.042	
2319-RU-120320-02-01	0.73	0.11	0.05	0.57	0.31	0.48	0.87	0.14	0.09	9.07	0.50	0.18	0.20	2.16	0.69	0.76	0.092	23500	56300	0.00310	0.082	
2319-RU-120320-02-02	0.64	0.10	0.05	0.49	0.37	0.59	0.73	0.11	0.08	7.42	0.41	0.11	0.15	1.56	0.60	0.70	0.075	23500	54940	0.00297	0.064	
2328-RU-120321-01-01	0.60	0.11	0.06	0.53	0.36	0.56	0.83	0.15	0.11	10.69	0.59	0.21	0.22	1.76	0.79	0.92	0.098	25780	59380	0.00318	0.089	
2328-RU-120321-01-02	0.64	0.10	0.05	1.57	0.41	0.52	0.68	0.13	0.10	5.82	0.32	0.13	0.19	1.59	0.61	0.75	0.108	25780	60780	0.00331	0.103	
2328-RU-120321-01-03	0.59	0.09	0.05	0.71	0.34	0.51	0.62	0.10	0.06	8.88	0.49	0.13	0.13	1.50	0.63	0.71	0.092	25780	61840	0.00341	0.090	
2328-RU-120321-02-01	0.61	0.11	0.07	0.63	0.33	0.50	0.73	0.15	0.10	8.90	0.49	0.14	0.18	1.24	0.38	0.90	0.087	23500	53340	0.00282	0.071	
2328-RU-120321-02-02	0.59	0.10	0.05	0.44	0.34	0.55	0.74	0.12	0.08	9.96	0.55	0.17	0.17	1.73	0.64	0.70	0.089	23500	53740	0.00286	0.074	
2328-RU-120321-02-03	0.48	0.08	0.05	0.68	0.34	0.51	0.57	0.10	0.06	6.35	0.35	0.14	0.16	1.58	0.57	0.63	0.076	23500	56440	0.00311	0.068	
2333-RU-120321-01-04	0.55	0.09	0.05	0.32	0.34	0.55	0.59	0.11	0.05	9.60	0.53	0.16	0.17	1.84	0.62	0.69	0.083	25780	58920	0.00313	0.075	
2333-RU-120321-01-05	0.77	0.13	0.06	1.52	0.43	0.57	0.89	0.17	0.11	9.25	0.51	0.16	0.20	2.25	0.78	0.92	0.131	25780	54100	0.00268	0.101	
2333-RU-120321-01-06	0.77	0.11	0.05	1.32	0.39	0.52	0.95	0.14	0.09	10.53	0.58	0.16	0.19	2.66	0.70	0.77	0.133	25780	60860	0.00332	0.128	
2333-RU-120321-02-04	0.65	0.11	0.06	1.16	0.37	0.51	0.74	0.14	0.13	9.08	0.50	0.15	0.18	2.37	0.84	0.89	0.116	23500	50480	0.00255	0.086	
2333-RU-120321-02-05	0.82	0.11	0.04	1.23	0.38	0.52	0.75	0.12	0.08	9.28	0.51	0.12	0.16	2.57	0.64	0.70	0.122	23500	52080	0.00270	0.095	
2333-RU-120321-02-06	0.64	0.11	0.06	1.00	0.36	0.51	0.73	0.12	0.11	9.44	0.52	0.13	0.16	2.43	0.73	0.79	0.113	23500	49120	0.00242	0.079	
2351-RU-120326-01-01	0.53	0.09	0.06	0.70	0.34	0.50	0.85	0.15	0.08	7.98	0.44	0.13	0.17	1.90	0.76	0.84	0.089	25780	65400	0.00375	0.096	
2351-RU-120326-01-02	0.66	0.13	0.08	0.67	0.34	0.51	0.86	0.15	0.09	9.07	0.50	0.14	0.19	2.27	0.87	0.97	0.096	25780	65880	0.00379	0.105	
2351-RU-120326-01-03	0.56	0.09	0.06	0.90	0.38	0.54	0.82	0.12	0.08	6.16	0.34	0.12	0.19	1.23	0.31	0.71	0.081	25780	62920	0.00351	0.082	
2351-RU-120326-02-01	0.63	0.11	0.06	0.78	0.39	0.58	0.84	0.14	0.10	7.34	0.40	0.12	0.16	2.56	0.77	0.83	0.092	23500	55060	0.00298	0.079	
2351-RU-120326-02-02	0.67	0.12	0.07	0.92	0.35	0.50	0.98	0.16	0.11	8.35	0.46	0.15	0.19	2.15	0.85	0.97	0.101	23500	58960	0.00335	0.098	
2351-RU-120326-02-03	0.65	0.10	0.06	0.82	0.36	0.53	0.86	0.13	0.05	7.11	0.39	0.15	0.16	2.12	0.66	0.71	0.089	23500	53640	0.00285	0.073	
2351-RU-120326-02-04	0.78	0.12	0.05	0.35	0.35	0.57	0.86	0.16	0.10	3.62	0.19	0.11	0.17	2.14	0.81	0.92	0.049	23500	53600	0.00285	0.040	
2355-RU-120326-01-04	0.68	0.11	0.05	0.43	0.30	0.48	0.95	0.16	0.12	3.00	0.16	0.11	0.15	1.48	0.62	0.96	0.044	25780	63140	0.00353	0.045	
2355-RU-120326-01-05	0.88	0.16	0.09	0.30	0.32	0.52	1.23	0.19	0.10	5.64	0.31	0.18	0.23	1.61	0.69	0.90	0.171	25780	62000	0.00343	0.169	
2355-RU-120326-01-06	0.75	0.12	0.06	0.34	0.35	0.57	1.03	0.15	0.13	2.88	0.15	0.16	0.24	1.84	0.67	0.79	0.057	25780	64780	0.00369	0.061	
2355-RU-120326-01-07	0.66	0.11	0.05	0.13	0.32	0.54	0.82	0.14	0.11	4.77	0.26	0.11	0.17	1.68	0.71	0.81	0.045	25780	60380	0.00327	0.042	
2355-RU-120326-02-05	0.80	0.12	0.06	0.41	0.30	0.48	1.05	0.16	0.12	7.61	0.42	0.17	0.21	1.25	0.38	0.92	0.096	23500	56260	0.00310	0.085	
2355-RU-120326-02-06	0.77	0.13	0.07	0.35	0.34	0.55	1.16	0.24	0.14	2.94	0.16	0.14	0.24	1.07	0.38	0.95	0.118	23500	55400	0.00302	0.103	
2355-RU-120326-02-07	0.84	0.14	0.08	0.28	0.32	0.53	0.72	0.15	0.14	5.29	0.29	0.13	0.18	1.59	0.72	0.85	0.053	23500	53420	0.00283	0.043	
2363-RU-120326-02-08	0.70	0.10	0.05	0.53	0.33	0.52	0.76	0.13	0.10	9.41	0.52	0.16	0.16	1.89	0.77	0.81	0.091	23500	52080	0.00270	0.070	
2363-RU-120327-01-01	0.64	0.10	0.05	0.71	0.35	0.52	0.86	0.15	0.08	5.80	0.32	0.12	0.15	1.41	0.61	0.70	0.073	25780	62040	0.00343	0.072	

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 36 of 65			
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Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																					
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC					
2363-RU-120327-01-02	0.64	0.09	0.04	1.38	0.37	0.45	0.61	0.12	0.07	3.28	0.18	0.11	0.19	0.91	0.26	0.62	0.081	25780	65640	0.00377	0.088
2363-RU-120327-01-03	0.82	0.12	0.06	0.65	0.28	0.40	1.08	0.17	0.09	4.39	0.24	0.13	0.16	1.45	0.56	0.70	0.102	25780	62260	0.00345	0.101
2363-RU-120327-02-01	0.71	0.11	0.05	2.37	0.42	0.39	0.87	0.14	0.09	6.35	0.35	0.16	0.21	1.59	0.58	0.69	0.143	23500	54040	0.00289	0.119
2363-RU-120327-02-02	0.63	0.10	0.06	1.26	0.39	0.50	0.73	0.13	0.04	3.83	0.21	0.12	0.15	1.19	0.63	0.74	0.081	23500	57640	0.00323	0.075
2363-RU-120327-02-03	0.93	0.13	0.07	0.57	0.27	0.40	1.05	0.16	0.09	4.58	0.25	0.12	0.18	1.55	0.63	0.77	0.101	23500	50440	0.00255	0.074
2366-RU-120327-01-04	0.96	0.14	0.06	-0.09	0.31	0.55	1.01	0.16	0.07	7.45	0.41	0.18	0.20	2.00	0.67	0.75	0.095	25780	61900	0.00342	0.093
2366-RU-120327-01-05	0.48	0.08	0.04	1.59	0.41	0.51	0.65	0.10	0.07	4.10	0.22	0.10	0.12	1.35	0.46	0.55	0.097	25780	65900	0.00379	0.106
2366-RU-120327-01-06	1.01	0.14	0.06	0.10	0.29	0.49	1.08	0.17	0.08	5.87	0.32	0.17	0.19	2.05	0.78	0.87	0.150	25780	61680	0.00339	0.147
2366-RU-120327-02-04	0.72	0.11	0.06	0.21	0.29	0.48	1.04	0.16	0.09	3.01	0.16	0.13	0.22	1.58	0.62	0.74	0.056	23500	55840	0.00306	0.050
2366-RU-120327-02-05	0.57	0.09	0.04	1.44	0.40	0.51	0.61	0.11	0.05	4.63	0.26	0.10	0.12	0.91	0.24	0.56	0.091	23500	57100	0.00318	0.084
2366-RU-120327-02-06	0.81	0.12	0.06	0.77	0.36	0.53	1.01	0.15	0.12	4.98	0.27	0.12	0.18	1.91	0.75	0.86	0.078	23500	55640	0.00304	0.068
2366-RU-120327-02-07	0.97	0.14	0.07	0.03	0.32	0.54	0.98	0.16	0.10	3.65	0.20	0.11	0.16	1.08	0.32	0.75	0.067	23500	53320	0.00282	0.054
2378-RU-120328-01-01	0.72	0.11	0.05	0.99	0.34	0.47	0.74	0.12	0.09	5.82	0.32	0.13	0.17	1.57	0.66	0.75	0.085	25780	66320	0.00383	0.094
2378-RU-120328-01-02	0.79	0.11	0.05	0.59	0.26	0.37	0.80	0.12	0.08	4.00	0.22	0.09	0.15	1.10	0.44	0.59	0.055	25780	64440	0.00366	0.058
2378-RU-120328-01-03	0.93	0.13	0.06	0.58	0.30	0.44	1.06	0.16	0.13	4.05	0.22	0.12	0.18	1.48	0.69	0.83	0.103	25780	62580	0.00348	0.103
2378-RU-120328-02-01	0.72	0.11	0.06	1.01	0.36	0.48	0.70	0.13	0.08	4.35	0.24	0.13	0.15	0.73	0.26	0.81	0.071	23500	58380	0.00330	0.068
2378-RU-120328-02-02	0.92	0.13	0.06	0.40	0.31	0.50	1.06	0.17	0.10	6.34	0.35	0.14	0.20	1.10	0.34	0.81	0.102	23500	52440	0.00274	0.081
2378-RU-120328-02-03	0.87	0.13	0.07	0.41	0.29	0.45	1.10	0.17	0.09	6.70	0.37	0.14	0.21	1.50	0.78	0.90	0.117	23500	57360	0.00320	0.108
2381-RU-120327-01-07	0.72	0.11	0.05	0.86	0.33	0.45	0.80	0.13	0.07	4.39	0.24	0.11	0.16	1.45	0.52	0.62	0.070	25780	64400	0.00365	0.074
2382-RU-120328-01-04	0.79	0.12	0.07	0.17	0.28	0.46	1.06	0.19	0.12	5.27	0.29	0.16	0.19	1.37	0.66	0.85	0.077	25780	63240	0.00354	0.079
2382-RU-120328-01-05	0.84	0.13	0.06	0.62	0.27	0.40	0.97	0.15	0.11	5.29	0.29	0.13	0.18	1.58	0.73	0.86	0.067	25780	61020	0.00333	0.064
2382-RU-120328-01-06	0.57	0.09	0.05	1.00	0.35	0.49	0.64	0.13	0.11	6.16	0.34	0.10	0.14	1.41	0.62	0.71	0.086	25780	65620	0.00377	0.094
2382-RU-120328-01-07	0.82	0.13	0.06	0.46	0.31	0.48	0.84	0.14	0.11	12.50	0.69	0.18	0.24	2.08	0.58	0.69	0.108	25780	65560	0.00376	0.117
2382-RU-120328-02-04	0.67	0.11	0.06	0.89	0.30	0.41	0.80	0.13	0.06	5.82	0.32	0.12	0.17	1.64	0.56	0.67	0.081	23500	58740	0.00333	0.078
2382-RU-120328-02-05	0.76	0.11	0.06	0.54	0.28	0.42	1.11	0.17	0.09	5.33	0.29	0.13	0.16	1.96	0.84	0.92	0.121	23500	55120	0.00299	0.104
2382-RU-120328-02-06	0.60	0.10	0.05	0.89	0.33	0.47	0.88	0.15	0.08	5.46	0.30	0.10	0.15	1.61	0.61	0.71	0.079	23500	57300	0.00320	0.073
2382-RU-120328-02-07	0.76	0.11	0.04	0.71	0.29	0.41	0.91	0.14	0.12	8.51	0.47	0.14	0.17	1.64	0.56	0.66	0.091	23500	59780	0.00343	0.090
2394-RU-120329-01-03	0.65	0.12	0.08	0.50	0.27	0.41	1.00	0.16	0.10	3.77	0.20	0.17	0.20	1.95	0.80	0.93	0.055	25780	59480	0.00319	0.050
2394-RU-120329-01-04	0.63	0.11	0.07	0.47	0.28	0.43	1.05	0.17	0.12	2.95	0.16	0.13	0.17	1.11	0.36	0.91	0.068	25780	61620	0.00339	0.067
2394-RU-120329-01-05	0.70	0.11	0.06	0.52	0.29	0.44	1.11	0.16	0.10	7.10	0.39	0.17	0.19	1.97	0.70	0.82	0.131	25780	68700	0.00406	0.153
2394-RU-120329-01-06	0.66	0.10	0.05	0.52	0.31	0.48	0.92	0.15	0.11	8.56	0.47	0.14	0.17	2.46	0.78	0.85	0.088	25780	66840	0.00388	0.099
2394-RU-120329-01-07	0.77	0.12	0.07	0.28	0.28	0.46	1.01	0.16	0.09	4.45	0.24	0.13	0.20	1.86	0.73	0.86	0.055	25780	62620	0.00348	0.055
2394-RU-120329-02-03	0.78	0.13	0.07	0.20	0.29	0.48	1.13	0.19	0.10	3.16	0.17	0.10	0.17	1.43	0.55	0.72	0.101	23500	54120	0.00290	0.084

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Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																					
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC					
2394-RU-120329-02-04	0.94	0.14	0.07	0.31	0.30	0.48	1.22	0.20	0.10	4.09	0.22	0.16	0.21	1.77	0.86	0.99	0.179	23500	51420	0.00264	0.136
2394-RU-120329-02-05	0.68	0.11	0.07	0.98	0.34	0.47	0.88	0.17	0.10	8.01	0.44	0.19	0.22	2.24	0.62	0.73	0.102	23500	55640	0.00304	0.089
2394-RU-120329-02-06	0.81	0.12	0.06	0.24	0.29	0.48	1.11	0.19	0.11	7.49	0.41	0.18	0.19	2.32	0.75	0.87	0.125	23500	52260	0.00272	0.098
2394-RU-120329-02-07	0.58	0.09	0.07	0.43	0.28	0.44	0.84	0.14	0.08	6.89	0.38	0.13	0.17	1.56	0.36	0.77	0.069	23500	56860	0.00315	0.063
2405-RU-120402-01-01	0.61	0.10	0.06	0.73	0.32	0.46	0.90	0.13	0.09	10.50	0.58	0.14	0.17	2.03	0.61	0.71	0.106	25780	64500	0.00366	0.112
2405-RU-120402-01-02	0.41	0.07	0.03	0.41	0.29	0.46	0.69	0.12	0.07	6.17	0.34	0.10	0.13	0.91	0.27	0.60	0.060	25780	69160	0.00410	0.071
2405-RU-120402-01-03	0.58	0.10	0.05	0.44	0.27	0.42	0.94	0.14	0.09	3.98	0.21	0.13	0.22	2.28	0.72	0.78	0.055	25780	68480	0.00404	0.065
2405-RU-120402-01-04	0.52	0.08	0.05	0.55	0.29	0.44	0.87	0.13	0.08	13.47	0.74	0.15	0.17	1.72	0.37	0.73	0.115	25780	68540	0.00404	0.134
2405-RU-120402-02-01	0.62	0.11	0.06	0.37	0.29	0.46	0.97	0.16	0.10	6.36	0.35	0.16	0.18	0.89	0.31	0.75	0.059	23500	51600	0.00266	0.045
2405-RU-120402-02-02	0.70	0.11	0.06	0.36	0.25	0.39	1.12	0.19	0.12	5.09	0.28	0.12	0.17	1.33	0.57	0.75	0.114	23500	51620	0.00266	0.087
2405-RU-120402-02-03	0.65	0.10	0.06	0.51	0.30	0.46	0.96	0.14	0.09	14.67	0.81	0.20	0.23	2.59	0.82	0.89	0.126	23500	57980	0.00326	0.119
2405-RU-120402-02-04	0.61	0.10	0.06	0.74	0.31	0.45	0.82	0.13	0.10	13.17	0.72	0.16	0.17	1.44	0.36	0.76	0.119	23500	59780	0.00343	0.118
2408-RU-120402-01-05	0.65	0.10	0.06	0.64	0.38	0.58	0.97	0.15	0.06	8.87	0.49	0.15	0.20	1.62	0.76	0.84	0.090	25780	67220	0.00392	0.102
2408-RU-120402-01-06	0.62	0.10	0.06	0.45	0.35	0.56	0.81	0.13	0.12	9.43	0.52	0.17	0.18	1.42	0.36	0.79	0.085	25780	65700	0.00378	0.092
2408-RU-120402-01-07	0.69	0.11	0.06	0.85	0.37	0.55	0.95	0.16	0.10	9.43	0.52	0.15	0.17	2.25	0.72	0.79	0.106	25780	65400	0.00375	0.114
2408-RU-120402-01-08	0.69	0.12	0.07	0.21	0.32	0.54	0.98	0.14	0.09	10.14	0.56	0.13	0.16	2.21	0.74	0.83	0.084	25780	66020	0.00381	0.092
2408-RU-120402-02-05	0.80	0.12	0.07	0.06	0.31	0.52	1.11	0.16	0.11	4.43	0.24	0.12	0.17	1.76	0.66	0.79	0.095	23500	53060	0.00280	0.077
2408-RU-120402-02-06	0.77	0.13	0.07	0.11	0.30	0.51	1.04	0.17	0.13	4.92	0.27	0.17	0.21	1.46	0.39	0.96	0.063	23500	53180	0.00281	0.051
2408-RU-120402-02-07	0.65	0.10	0.05	0.50	0.32	0.50	0.84	0.13	0.07	8.15	0.45	0.12	0.16	1.46	0.54	0.66	0.079	23500	58340	0.00329	0.075
2411-RU-120403-01-01	0.69	0.11	0.05	0.07	0.29	0.49	1.21	0.19	0.08	3.58	0.19	0.13	0.22	1.89	0.68	0.77	0.141	25780	59660	0.00320	0.130
2411-RU-120403-01-02	0.73	0.13	0.08	0.21	0.28	0.46	0.94	0.15	0.13	3.01	0.16	0.14	0.23	1.58	0.46	0.90	0.036	25780	60920	0.00332	0.035
2411-RU-120403-01-03	0.64	0.10	0.07	0.47	0.34	0.53	1.02	0.15	0.11	3.39	0.18	0.14	0.22	1.74	0.66	0.79	0.060	25780	62160	0.00344	0.059
2411-RU-120403-01-04	0.72	0.11	0.05	0.48	0.32	0.49	0.96	0.15	0.07	5.49	0.30	0.12	0.15	1.80	0.75	0.81	0.064	25780	63340	0.00355	0.065
2411-RU-120403-01-05	0.71	0.12	0.07	0.19	0.30	0.49	0.96	0.16	0.12	2.65	0.14	0.13	0.23	1.49	0.62	0.75	0.033	25780	63340	0.00355	0.033
2411-RU-120403-01-06	0.76	0.12	0.07	0.30	0.30	0.49	0.93	0.15	0.10	5.79	0.32	0.14	0.17	1.10	0.34	0.83	0.054	25780	69020	0.00409	0.064
2411-RU-120403-01-07	0.68	0.11	0.07	0.14	0.31	0.52	1.00	0.15	0.12	5.16	0.28	0.17	0.20	1.95	0.65	0.75	0.049	25780	68460	0.00404	0.057
2411-RU-120403-01-08	0.68	0.10	0.05	0.97	0.34	0.48	1.02	0.15	0.08	5.15	0.28	0.11	0.16	1.91	0.61	0.71	0.092	25780	66520	0.00385	0.102
2411-RU-120403-02-01	0.77	0.12	0.06	0.22	0.28	0.46	0.93	0.16	0.12	4.39	0.24	0.12	0.17	1.42	0.73	0.86	0.044	23500	51640	0.00266	0.034
2411-RU-120403-02-02	0.70	0.11	0.06	0.08	0.29	0.50	1.03	0.17	0.11	4.75	0.26	0.14	0.19	1.49	0.58	0.72	0.056	23500	53880	0.00287	0.047
2411-RU-120403-02-03	0.70	0.10	0.05	0.37	0.31	0.50	1.02	0.16	0.10	5.31	0.29	0.11	0.16	1.81	0.74	0.82	0.068	23500	55880	0.00306	0.060
2411-RU-120403-02-04	0.70	0.11	0.06	0.57	0.32	0.48	1.10	0.16	0.07	4.54	0.25	0.16	0.19	1.17	0.34	0.80	0.108	23500	54420	0.00292	0.091
2411-RU-120403-02-05	0.75	0.12	0.06	0.36	0.32	0.51	1.04	0.16	0.12	2.79	0.15	0.11	0.18	1.24	0.50	0.67	0.059	23500	58840	0.00334	0.057
2411-RU-120403-02-06	0.78	0.12	0.06	0.19	0.29	0.49	1.04	0.16	0.09	4.35	0.24	0.12	0.16	1.03	0.31	0.73	0.061	23500	60280	0.00348	0.061

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Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																					
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC					
2411-RU-120403-02-07	0.80	0.12	0.06	0.89	0.35	0.49	1.07	0.17	0.11	8.15	0.45	0.16	0.19	1.43	0.40	0.89	0.129	23500	56380	0.00311	0.116
2412-RU-120402-02-08	0.66	0.10	0.06	0.49	0.31	0.48	0.96	0.14	0.10	9.64	0.53	0.17	0.20	1.28	0.32	0.72	0.087	23500	55520	0.00303	0.076
2426-RU-120403-02-08	0.83	0.13	0.06	0.88	0.33	0.47	0.99	0.17	0.11	6.88	0.38	0.17	0.20	1.48	0.36	0.79	0.086	23500	57240	0.00319	0.079
2426-RU-120404-01-01	0.75	0.11	0.05	0.21	0.27	0.44	1.02	0.15	0.08	2.16	0.11	0.13	0.21	1.54	0.63	0.73	0.041	25780	67160	0.00391	0.046
2426-RU-120404-01-02	0.74	0.11	0.06	0.16	0.30	0.50	1.22	0.20	0.09	2.64	0.14	0.14	0.23	1.40	0.65	0.78	0.141	25780	68460	0.00404	0.164
2426-RU-120404-01-03	0.70	0.12	0.07	-0.10	0.32	0.57	0.98	0.15	0.10	4.20	0.23	0.12	0.17	1.30	0.59	0.75	0.034	25780	66600	0.00386	0.037
2426-RU-120404-01-04	0.84	0.12	0.05	0.21	0.30	0.49	1.05	0.17	0.10	3.64	0.20	0.11	0.16	1.02	0.50	0.67	0.062	25780	66580	0.00386	0.069
2426-RU-120404-02-01	0.66	0.10	0.06	0.04	0.34	0.58	0.97	0.14	0.10	4.02	0.22	0.10	0.15	1.28	0.53	0.68	0.034	23500	58240	0.00329	0.032
2426-RU-120404-02-02	0.76	0.11	0.06	0.11	0.30	0.51	1.02	0.16	0.10	2.75	0.15	0.12	0.22	0.96	0.31	0.76	0.037	23500	58820	0.00334	0.036
2426-RU-120404-02-03	0.83	0.14	0.07	0.13	0.33	0.57	1.17	0.19	0.14	2.53	0.38	0.18	0.25	1.11	0.17	0.03	0.117	23500	57860	0.00325	0.110
2426-RU-120404-02-04	0.75	0.11	0.06	0.60	0.37	0.58	0.92	0.15	0.10	6.94	0.38	0.14	0.18	2.17	0.68	0.77	0.044	23500	61340	0.00358	0.045
2433-RU-120404-01-05	0.70	0.10	0.06	0.42	0.29	0.46	1.02	0.15	0.10	7.97	0.44	0.12	0.16	1.47	0.33	0.73	0.085	25780	69760	0.00416	0.101
2433-RU-120404-01-06	0.78	0.12	0.06	1.00	0.36	0.50	1.01	0.16	0.11	10.34	0.57	0.14	0.18	2.59	0.79	0.86	0.124	25780	70060	0.00419	0.150
2433-RU-120404-01-07	0.82	0.13	0.07	0.62	0.29	0.43	1.08	0.17	0.09	10.50	0.58	0.17	0.20	2.09	0.43	0.86	0.142	25780	68040	0.00400	0.164
2433-RU-120404-01-08	0.73	0.10	0.05	0.67	0.32	0.49	1.06	0.17	0.10	8.88	0.49	0.18	0.20	2.06	0.62	0.71	0.124	25780	67820	0.00398	0.142
2433-RU-120404-01-09	0.82	0.12	0.05	0.55	0.32	0.48	0.91	0.15	0.11	8.33	0.46	0.15	0.20	1.49	0.37	0.79	0.082	25780	65820	0.00379	0.090
2433-RU-120404-02-05	0.81	0.12	0.05	0.51	0.32	0.50	0.89	0.14	0.11	16.12	0.88	0.19	0.21	1.71	0.39	0.81	0.130	23500	58080	0.00327	0.122
2433-RU-120404-02-06	0.71	0.10	0.05	0.45	0.30	0.47	1.10	0.17	0.11	9.60	0.53	0.13	0.17	2.01	0.71	0.82	0.139	23500	58700	0.00333	0.133
2433-RU-120404-02-07	0.81	0.11	0.05	0.81	0.35	0.51	1.08	0.16	0.09	8.90	0.49	0.15	0.17	2.31	0.69	0.76	0.141	23500	60560	0.00350	0.142
2433-RU-120404-02-08	0.68	0.11	0.06	0.50	0.31	0.48	0.90	0.13	0.09	9.96	0.55	0.15	0.16	1.84	0.68	0.79	0.092	23500	61320	0.00358	0.095
2448-RU-120409-01-01	0.82	0.13	0.07	0.68	0.28	0.40	1.00	0.16	0.11	6.76	0.37	0.14	0.19	2.11	0.68	0.81	0.081	25780	68840	0.00407	0.095
2448-RU-120409-01-02	0.90	0.13	0.06	0.89	0.32	0.45	1.14	0.19	0.09	9.29	0.51	0.16	0.21	2.74	0.81	0.87	0.179	25780	68980	0.00409	0.211
2448-RU-120409-02-01	0.80	0.12	0.06	0.76	0.30	0.43	0.96	0.15	0.09	10.34	0.57	0.18	0.19	2.48	0.73	0.80	0.109	23500	61060	0.00355	0.111
2448-RU-120409-02-02	0.69	0.10	0.06	0.79	0.30	0.43	0.92	0.17	0.10	6.74	0.37	0.16	0.20	1.95	0.73	0.83	0.085	23500	59040	0.00336	0.082
2458-RU-120410-01-01	0.78	0.14	0.08	0.72	0.30	0.43	0.96	0.15	0.11	9.06	0.50	0.17	0.19	2.13	0.73	0.87	0.097	25780	68180	0.00401	0.112
2458-RU-120410-01-02	0.83	0.13	0.07	0.50	0.32	0.50	0.98	0.17	0.11	4.56	0.25	0.18	0.21	1.45	0.60	0.93	0.057	25780	67600	0.00395	0.065
2458-RU-120410-01-03	0.44	0.08	0.04	4.22	0.62	0.45	0.54	0.10	0.06	11.97	0.66	0.14	0.15	1.82	0.60	0.69	0.253	25780	67160	0.00391	0.285
2458-RU-120410-01-04	0.38	0.07	0.06	6.11	0.79	0.46	0.60	0.11	0.05	13.29	0.73	0.16	0.15	1.70	0.58	0.63	0.336	25780	66800	0.00388	0.375
2458-RU-120410-02-01	0.77	0.13	0.07	0.83	0.32	0.46	1.09	0.21	0.12	7.46	0.41	0.13	0.19	2.13	0.88	0.99	0.137	23500	59940	0.00345	0.136
2458-RU-120410-02-02	0.84	0.12	0.06	0.33	0.27	0.43	1.01	0.17	0.10	2.93	0.16	0.10	0.15	0.99	0.30	0.74	0.042	23500	58780	0.00334	0.040
2458-RU-120410-02-03	0.78	0.12	0.05	0.27	0.33	0.54	1.11	0.17	0.12	3.01	0.16	0.14	0.19	1.60	0.73	0.88	0.094	23500	57980	0.00326	0.088
2458-RU-120410-02-04	0.70	0.11	0.06	0.33	0.26	0.42	1.10	0.17	0.08	4.71	0.26	0.11	0.17	0.93	0.29	0.72	0.098	23500	61440	0.00359	0.101
2458-RU-120410-02-05	0.80	0.12	0.07	0.90	0.31	0.43	0.92	0.14	0.08	5.84	0.32	0.12	0.17	1.81	0.57	0.69	0.083	23500	59040	0.00336	0.080

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 39 of 65				
	Revision 1																					
Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC						
2460-RU-120410-01-05	0.94	0.14	0.06	-0.36	0.30	0.54	1.04	0.16	0.10	2.94	0.16	0.15	0.21	1.05	0.35	0.89	0.065	25780	64740	0.00368	0.069	
2460-RU-120410-01-06	0.91	0.13	0.07	0.43	0.35	0.55	1.08	0.18	0.13	2.84	0.15	0.13	0.26	1.58	0.78	0.92	0.089	25780	66420	0.00384	0.099	
2460-RU-120410-01-07	0.94	0.13	0.06	0.93	0.41	0.61	0.95	0.15	0.11	8.71	0.48	0.16	0.18	1.24	0.38	0.89	0.119	25780	68940	0.00408	0.140	
2460-RU-120410-01-08	0.75	0.12	0.06	0.36	0.34	0.54	0.97	0.14	0.05	6.16	0.34	0.15	0.17	1.37	0.55	0.72	0.061	25780	65960	0.00380	0.066	
2460-RU-120410-02-06	0.93	0.14	0.07	-0.18	0.29	0.51	1.03	0.15	0.09	2.52	0.13	0.12	0.16	1.73	0.72	0.85	0.056	23500	58720	0.00333	0.054	
2460-RU-120410-02-07	0.78	0.12	0.06	0.11	0.37	0.64	0.92	0.15	0.11	4.60	0.25	0.12	0.16	1.72	0.68	0.80	0.043	23500	59280	0.00338	0.042	
2460-RU-120410-02-08	0.96	0.14	0.06	0.28	0.35	0.58	1.02	0.17	0.12	5.15	0.28	0.13	0.19	1.88	0.75	0.87	0.096	23500	59500	0.00340	0.094	
2460-RU-120410-02-09	0.90	0.13	0.06	0.32	0.31	0.51	1.09	0.17	0.09	5.45	0.30	0.14	0.24	1.46	0.58	0.76	0.100	23500	57480	0.00321	0.093	
2467-RU-120411-01-01	0.60	0.10	0.06	2.38	0.49	0.55	0.60	0.10	0.07	14.67	0.81	0.19	0.19	2.53	0.73	0.76	0.201	25780	66260	0.00383	0.221	
2467-RU-120411-01-02	0.58	0.09	0.05	8.90	1.10	0.60	0.62	0.10	0.08	12.14	0.67	0.15	0.17	1.98	0.65	0.74	0.441	25780	67000	0.00390	0.496	
2467-RU-120411-01-03	0.62	0.09	0.05	1.84	0.50	0.65	0.61	0.10	0.09	9.23	0.51	0.15	0.19	1.89	0.53	0.63	0.142	25780	67060	0.00390	0.159	
2467-RU-120411-01-04	0.51	0.08	0.05	2.13	0.48	0.58	0.62	0.11	0.05	7.06	0.39	0.14	0.16	1.42	0.63	0.74	0.137	25780	65000	0.00371	0.146	
2467-RU-120411-02-01	0.58	0.09	0.05	5.28	0.73	0.53	0.65	0.11	0.06	16.55	0.91	0.20	0.20	2.19	0.65	0.69	0.326	23500	58940	0.00335	0.314	
2467-RU-120411-02-02	0.60	0.10	0.06	3.29	0.56	0.55	0.65	0.12	0.08	11.64	0.64	0.16	0.19	1.51	0.31	0.62	0.212	23500	57360	0.00320	0.196	
2467-RU-120411-02-03	0.69	0.11	0.06	1.54	0.45	0.60	0.78	0.12	0.10	8.70	0.48	0.15	0.17	2.11	0.70	0.76	0.128	23500	58800	0.00334	0.123	
2467-RU-120411-02-04	0.91	0.13	0.06	0.13	0.34	0.57	1.02	0.14	0.09	2.10	0.11	0.13	0.21	1.21	0.61	0.74	0.040	23500	57980	0.00326	0.038	
2475-RU-120411-01-05	0.53	0.09	0.05	1.15	0.42	0.59	0.69	0.11	0.11	7.79	0.43	0.13	0.14	1.26	0.30	0.62	0.101	25780	67500	0.00395	0.115	
2475-RU-120411-01-06	0.56	0.09	0.05	1.00	0.35	0.48	0.75	0.13	0.07	7.25	0.40	0.12	0.15	1.70	0.50	0.59	0.095	25780	69260	0.00411	0.112	
2475-RU-120411-01-07	0.78	0.12	0.07	-0.01	0.30	0.52	1.09	0.19	0.13	2.38	0.12	0.13	0.23	1.91	0.76	0.86	0.071	25780	65340	0.00374	0.076	
2475-RU-120411-02-05	0.50	0.08	0.05	2.01	0.45	0.52	0.67	0.10	0.09	10.14	0.56	0.17	0.19	1.86	0.66	0.72	0.154	23500	60540	0.00350	0.155	
2475-RU-120411-02-06	0.72	0.12	0.07	0.41	0.32	0.51	0.92	0.14	0.10	6.88	0.38	0.14	0.18	1.16	0.33	0.76	0.066	23500	58440	0.00330	0.063	
2475-RU-120411-02-07	0.76	0.12	0.07	0.09	0.30	0.51	1.08	0.17	0.09	2.13	0.11	0.14	0.23	1.45	0.36	0.80	0.065	23500	56800	0.00315	0.059	
2475-RU-120411-02-08	0.79	0.12	0.06	0.25	0.35	0.59	1.05	0.15	0.09	3.87	0.21	0.11	0.16	1.47	0.55	0.71	0.068	23500	58540	0.00331	0.064	
2497-RU-120417-01-01	0.94	0.14	0.06	0.39	0.32	0.51	1.08	0.19	0.10	9.60	0.53	0.19	0.22	1.68	0.40	0.84	0.146	25780	64720	0.00368	0.155	
2497-RU-120417-01-02	0.71	0.11	0.08	0.38	0.26	0.41	1.10	0.16	0.07	8.53	0.47	0.14	0.21	2.18	0.75	0.91	0.131	25780	64740	0.00368	0.139	
2497-RU-120417-01-03	0.72	0.11	0.06	0.27	0.28	0.46	1.13	0.16	0.12	7.62	0.42	0.18	0.19	1.91	0.76	0.86	0.134	25780	63420	0.00356	0.138	
2497-RU-120417-01-04	0.85	0.15	0.08	0.25	0.28	0.45	1.14	0.19	0.11	6.20	0.34	0.19	0.24	1.86	0.72	0.89	0.129	25780	64080	0.00362	0.135	
2497-RU-120417-02-05	0.83	0.12	0.06	0.25	0.32	0.52	1.15	0.17	0.12	9.60	0.53	0.16	0.21	2.04	0.83	0.94	0.156	23500	55540	0.00303	0.137	
2497-RU-120417-02-06	0.76	0.12	0.06	0.34	0.28	0.44	0.95	0.15	0.11	5.90	0.32	0.18	0.21	2.31	0.80	0.91	0.064	23500	57140	0.00318	0.058	
2497-RU-120417-02-07	0.78	0.12	0.06	0.10	0.27	0.46	1.04	0.16	0.09	4.58	0.25	0.14	0.17	1.54	0.73	0.91	0.061	23500	54880	0.00297	0.052	
2505-RU-120418-01-01	0.71	0.13	0.09	0.35	0.30	0.48	1.02	0.17	0.11	1.88	0.10	0.15	0.25	0.98	0.38	0.96	0.041	25780	64580	0.00367	0.044	
2505-RU-120418-01-02	0.75	0.12	0.07	0.18	0.26	0.44	1.14	0.17	0.09	3.82	0.21	0.16	0.24	1.09	0.33	0.79	0.107	25780	67540	0.00395	0.122	
2505-RU-120418-01-03	0.57	0.09	0.05	1.22	0.36	0.46	0.64	0.13	0.09	10.82	0.59	0.18	0.19	1.09	0.32	0.76	0.122	25780	69080	0.00409	0.144	

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 40 of 65			
	Revision 1																				
Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																					
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC					
2505-RU-120418-01-04	0.48	0.09	0.05	2.71	0.47	0.45	0.58	0.10	0.05	6.90	0.38	0.12	0.13	1.78	0.57	0.62	0.161	25780	71220	0.00430	0.199
2505-RU-120418-02-01	0.81	0.14	0.09	0.23	0.28	0.46	1.19	0.22	0.18	7.44	0.41	0.19	0.22	1.06	0.36	0.91	0.156	23500	57300	0.00320	0.144
2505-RU-120418-02-02	0.64	0.10	0.05	0.27	0.30	0.49	1.08	0.16	0.11	2.79	0.15	0.10	0.19	1.25	0.63	0.81	0.075	23500	58140	0.00328	0.071
2505-RU-120418-02-03	0.48	0.08	0.04	2.60	0.48	0.48	0.71	0.13	0.06	9.42	0.52	0.12	0.14	2.13	0.67	0.72	0.175	23500	61940	0.00364	0.183
2505-RU-120418-02-04	0.41	0.09	0.06	1.11	0.38	0.52	0.61	0.12	0.10	8.92	0.49	0.17	0.20	1.15	0.35	0.80	0.106	23500	61160	0.00356	0.109
2507-RU-120418-01-05	0.51	0.08	0.04	3.72	0.60	0.55	0.56	0.09	0.07	7.97	0.44	0.10	0.13	1.47	0.57	0.62	0.206	25780	70960	0.00427	0.254
2507-RU-120418-01-06	0.67	0.12	0.06	1.02	0.39	0.56	0.72	0.13	0.08	7.06	0.39	0.11	0.16	1.40	0.51	0.66	0.093	25780	68640	0.00405	0.108
2507-RU-120418-01-07	0.95	0.14	0.08	0.09	0.30	0.52	0.93	0.16	0.09	2.46	0.13	0.11	0.18	1.42	0.63	0.79	0.053	25780	67700	0.00396	0.061
2507-RU-120418-01-08	0.95	0.14	0.07	0.12	0.30	0.51	1.26	0.17	0.10	6.71	0.37	0.14	0.17	1.68	0.66	0.79	0.213	25780	66460	0.00385	0.236
2507-RU-120418-02-05	0.58	0.10	0.05	1.84	0.42	0.50	0.53	0.11	0.05	12.33	0.68	0.18	0.19	1.95	0.71	0.81	0.161	23500	59560	0.00341	0.158
2507-RU-120418-02-06	0.87	0.13	0.06	0.65	0.32	0.48	0.88	0.17	0.12	6.34	0.35	0.16	0.19	1.31	0.61	0.79	0.073	23500	58960	0.00335	0.070
2507-RU-120418-02-07	0.96	0.14	0.06	0.15	0.32	0.54	1.06	0.15	0.08	5.61	0.31	0.14	0.17	1.12	0.33	0.77	0.109	23500	57880	0.00325	0.102
2507-RU-120418-02-08	1.00	0.14	0.06	0.03	0.30	0.51	1.23	0.17	0.10	2.52	0.13	0.14	0.23	1.78	0.66	0.77	0.195	23500	57820	0.00325	0.182
2513-RU-120418-01-09	1.12	0.15	0.07	0.06	0.29	0.50	1.18	0.17	0.12	3.37	0.18	0.15	0.25	1.63	0.67	0.81	0.239	25780	67080	0.00391	0.268
2514-RU-120419-01-01	0.95	0.13	0.06	0.10	0.36	0.61	0.95	0.15	0.15	4.21	0.23	0.13	0.17	1.44	0.60	0.75	0.065	25780	65340	0.00374	0.070
2514-RU-120419-01-02	0.95	0.14	0.06	-0.07	0.31	0.54	0.97	0.17	0.09	4.22	0.23	0.14	0.20	1.50	0.58	0.75	0.061	25780	64480	0.00366	0.065
2514-RU-120419-01-03	1.00	0.15	0.07	0.47	0.33	0.52	1.15	0.17	0.10	2.88	0.15	0.14	0.24	1.82	0.75	0.85	0.175	25780	63800	0.00360	0.181
2514-RU-120419-01-04	0.96	0.15	0.08	0.15	0.31	0.52	1.04	0.20	0.14	2.71	0.14	0.15	0.26	1.84	0.81	0.96	0.085	25780	65140	0.00372	0.091
2514-RU-120419-02-01	0.94	0.14	0.07	-0.24	0.31	0.55	1.09	0.18	0.11	5.13	0.28	0.15	0.23	1.74	0.65	0.77	0.108	23500	53840	0.00287	0.089
2514-RU-120419-02-02	1.09	0.15	0.06	0.12	0.29	0.49	1.05	0.17	0.11	5.25	0.29	0.15	0.21	1.11	0.36	0.90	0.169	23500	56540	0.00312	0.152
2514-RU-120419-02-03	0.85	0.13	0.08	-0.03	0.31	0.54	1.00	0.19	0.14	5.43	0.30	0.22	0.24	0.96	0.36	0.93	0.039	23500	59300	0.00339	0.038
2514-RU-120419-02-04	0.95	0.15	0.10	-0.13	0.28	0.49	1.15	0.19	0.11	3.32	0.18	0.15	0.26	1.25	0.69	0.91	0.129	23500	56240	0.00310	0.115
2518-RU-120419-01-05	0.71	0.13	0.08	0.00	0.32	0.55	0.92	0.16	0.13	3.17	0.17	0.11	0.19	1.51	0.69	0.85	0.029	25780	66380	0.00384	0.032
2518-RU-120419-01-06	0.71	0.10	0.05	0.40	0.31	0.50	0.91	0.15	0.11	4.74	0.26	0.14	0.17	1.39	0.56	0.71	0.053	25780	67640	0.00396	0.061
2518-RU-120419-01-07	0.69	0.10	0.04	-0.10	0.27	0.49	1.08	0.18	0.07	4.56	0.25	0.15	0.18	1.40	0.59	0.73	0.076	25780	64760	0.00369	0.081
2518-RU-120419-01-08	0.62	0.12	0.07	-0.03	0.24	0.41	0.83	0.17	0.10	2.46	0.13	0.16	0.26	1.37	0.66	0.86	0.023	25780	68620	0.00405	0.027
2518-RU-120419-02-05	0.66	0.12	0.07	-0.07	0.29	0.51	1.06	0.18	0.10	3.36	0.18	0.17	0.25	1.60	0.77	0.92	0.060	23500	58200	0.00328	0.057
2518-RU-120419-02-06	0.72	0.12	0.06	0.52	0.32	0.50	1.07	0.17	0.11	7.80	0.43	0.15	0.17	1.87	0.74	0.84	0.115	23500	56180	0.00309	0.102
2518-RU-120419-02-07	0.70	0.11	0.06	0.38	0.34	0.56	0.87	0.15	0.11	3.69	0.20	0.12	0.18	1.39	0.62	0.80	0.046	23500	56600	0.00313	0.042
2518-RU-120419-02-08	0.73	0.11	0.06	0.12	0.31	0.52	1.05	0.15	0.11	3.53	0.19	0.13	0.16	1.57	0.66	0.80	0.061	23500	53840	0.00287	0.050
2533-RU-120424-01-01	0.92	0.15	0.08	0.37	0.31	0.49	1.08	0.16	0.12	4.60	0.25	0.14	0.19	1.66	0.70	0.85	0.103	25780	70460	0.00423	0.126
2533-RU-120424-01-02	0.89	0.14	0.07	-0.01	0.28	0.49	1.14	0.18	0.08	2.45	0.13	0.15	0.26	1.27	0.72	0.89	0.093	25780	66820	0.00388	0.103
2533-RU-120424-01-03	0.92	0.14	0.07	-0.07	0.26	0.47	1.05	0.17	0.10	3.19	0.17	0.14	0.20	1.59	0.75	0.91	0.065	25780	65700	0.00378	0.070

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																		Page 41 of 65			
	Revision 1																					
Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																						
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF	
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC						
2533-RU-120424-01-04	0.79	0.12	0.07	0.29	0.32	0.52	1.14	0.18	0.09	3.29	0.18	0.14	0.21	1.02	0.34	0.82	0.108	25780	62860	0.00351	0.109	
2533-RU-120424-02-01	0.90	0.14	0.06	0.07	0.32	0.55	1.08	0.18	0.11	4.41	0.24	0.17	0.22	1.61	0.61	0.78	0.080	23500	58440	0.00330	0.076	
2533-RU-120424-02-02	0.83	0.13	0.08	0.06	0.26	0.44	1.26	0.23	0.11	2.26	0.12	0.19	0.27	1.16	0.67	0.88	0.153	23500	61100	0.00356	0.157	
2533-RU-120424-02-03	1.03	0.14	0.06	0.13	0.28	0.47	1.20	0.19	0.10	3.55	0.19	0.15	0.24	1.67	0.81	0.94	0.205	23500	56000	0.00307	0.182	
2533-RU-120424-02-04	0.84	0.12	0.05	0.09	0.31	0.53	0.89	0.15	0.10	2.16	0.11	0.11	0.21	1.65	0.63	0.77	0.027	23500	58560	0.00332	0.025	
2536-RU-120424-01-05	0.96	0.15	0.07	0.20	0.29	0.49	1.18	0.20	0.11	3.96	0.21	0.16	0.26	2.05	0.83	0.97	0.166	25780	69840	0.00417	0.199	
2536-RU-120424-01-06	0.99	0.17	0.09	0.16	0.29	0.49	1.18	0.24	0.14	4.18	0.23	0.16	0.25	1.14	0.40	0.96	0.176	25780	70060	0.00419	0.213	
2536-RU-120424-01-07	0.96	0.14	0.06	0.23	0.29	0.48	1.05	0.16	0.13	2.58	0.14	0.13	0.18	0.97	0.33	0.99	0.087	25780	68280	0.00402	0.101	
2536-RU-120424-01-08	0.91	0.13	0.06	0.25	0.32	0.54	0.92	0.17	0.10	1.75	0.09	0.13	0.23	1.25	0.69	0.84	0.033	25780	71460	0.00432	0.041	
2536-RU-120424-02-05	0.97	0.15	0.06	-0.03	0.32	0.56	1.12	0.16	0.06	3.81	0.21	0.15	0.20	0.90	0.36	0.92	0.126	23500	58980	0.00336	0.121	
2536-RU-120424-02-06	1.01	0.15	0.07	0.28	0.30	0.50	1.00	0.18	0.11	4.72	0.26	0.11	0.16	1.21	0.80	0.97	0.105	23500	61040	0.00355	0.108	
2536-RU-120424-02-07	0.92	0.13	0.06	0.30	0.31	0.51	0.99	0.16	0.10	7.79	0.43	0.16	0.20	1.66	0.68	0.82	0.081	23500	61220	0.00357	0.083	
2536-RU-120424-02-08	0.97	0.14	0.06	0.19	0.32	0.53	1.16	0.18	0.10	8.52	0.47	0.19	0.24	1.98	0.72	0.88	0.189	23500	60680	0.00352	0.191	
2548-RU-120425-01-01	0.84	0.15	0.09	0.09	0.27	0.47	1.04	0.18	0.11	2.46	0.13	0.16	0.26	1.39	0.69	0.90	0.047	25780	69760	0.00416	0.056	
2548-RU-120425-01-02	0.96	0.14	0.06	0.20	0.26	0.43	1.12	0.16	0.09	2.29	0.12	0.15	0.21	1.40	0.62	0.79	0.122	25780	67700	0.00396	0.139	
2548-RU-120425-01-03	0.90	0.13	0.06	0.15	0.28	0.47	1.05	0.15	0.10	2.25	0.12	0.14	0.23	1.13	0.33	0.78	0.052	25780	68840	0.00407	0.060	
2548-RU-120425-01-04	1.07	0.16	0.07	-0.02	0.24	0.42	1.00	0.17	0.14	3.50	0.19	0.14	0.18	1.34	0.59	0.78	0.119	25780	70200	0.00420	0.144	
2548-RU-120425-02-01	0.82	0.13	0.08	-0.12	0.27	0.48	1.24	0.18	0.11	2.51	0.14	0.10	0.18	0.98	0.31	0.79	0.141	23500	59120	0.00337	0.137	
2548-RU-120425-02-02	0.90	0.14	0.06	-0.05	0.26	0.45	0.91	0.16	0.12	3.00	0.16	0.15	0.26	1.49	0.74	0.89	0.027	23500	58560	0.00332	0.026	
2548-RU-120425-02-03	1.04	0.15	0.07	0.13	0.24	0.41	1.17	0.18	0.13	4.85	0.26	0.11	0.17	2.23	0.80	0.89	0.207	23500	59560	0.00341	0.203	
2548-RU-120425-02-04	0.93	0.13	0.06	0.19	0.29	0.48	1.09	0.16	0.09	4.90	0.27	0.15	0.17	1.24	0.35	0.83	0.106	23500	60180	0.00347	0.106	
2551-RU-120425-01-05	0.89	0.15	0.08	-0.02	0.27	0.48	1.08	0.19	0.15	4.92	0.27	0.18	0.26	1.47	0.80	0.99	0.079	25780	71700	0.00434	0.099	
2551-RU-120425-01-06	0.88	0.13	0.06	-0.03	0.28	0.49	1.00	0.17	0.09	5.27	0.29	0.13	0.17	1.44	0.61	0.77	0.041	25780	72700	0.00444	0.053	
2551-RU-120425-01-07	0.94	0.15	0.08	0.02	0.27	0.47	1.00	0.17	0.09	7.97	0.44	0.19	0.22	1.34	0.39	0.94	0.079	25780	67600	0.00395	0.090	
2551-RU-120425-01-08	0.87	0.13	0.05	0.45	0.31	0.49	0.95	0.15	0.12	9.07	0.50	0.15	0.18	2.23	0.61	0.74	0.087	25780	68360	0.00403	0.101	
2551-RU-120425-01-09	0.97	0.16	0.08	0.58	0.30	0.45	0.96	0.17	0.12	9.60	0.53	0.15	0.21	1.61	0.44	0.96	0.129	25780	68320	0.00402	0.149	
2551-RU-120425-02-05	1.04	0.15	0.07	0.11	0.25	0.43	1.24	0.18	0.08	4.40	0.24	0.16	0.24	1.51	0.75	0.91	0.234	23500	61320	0.00358	0.241	
2551-RU-120425-02-06	0.83	0.12	0.06	0.05	0.23	0.39	1.16	0.19	0.09	8.64	0.41	0.15	0.19	10.40	1.40	1.00	0.196	23500	59360	0.00339	0.191	
2551-RU-120425-02-07	0.95	0.16	0.08	0.57	0.28	0.41	1.10	0.19	0.09	12.16	0.67	0.22	0.24	3.00	0.86	0.99	0.192	23500	56600	0.00313	0.173	
2551-RU-120425-02-08	0.89	0.13	0.06	0.81	0.32	0.46	1.10	0.17	0.11	10.75	0.59	0.16	0.19	3.16	0.92	0.98	0.167	23500	58820	0.00334	0.161	
2551-RU-120425-02-09	0.99	0.14	0.06	1.06	0.32	0.43	1.13	0.18	0.07	14.85	0.82	0.20	0.21	2.92	0.90	0.94	0.264	23500	57860	0.00325	0.247	
2561-RU-120426-01-01	0.90	0.14	0.08	0.40	0.26	0.40	1.09	0.19	0.11	9.23	0.51	0.18	0.22	1.71	0.41	0.89	0.128	25780	69560	0.00414	0.153	
2561-RU-120426-01-02	0.92	0.15	0.09	0.07	0.17	0.28	1.19	0.18	0.13	2.55	0.13	0.17	0.27	1.95	0.75	0.91	0.135	25780	68540	0.00404	0.158	

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>																	Page 42 of 65			
	Revision 1																				
Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																					
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC	Infered Result	Result	Error	MDC	Result	Error	MDC					
2561-RU-120426-01-03	1.00	0.15	0.07	0.15	0.18	0.30	1.15	0.18	0.13	2.65	0.14	0.15	0.26	1.45	0.77	0.94	0.158	25780	68200	0.00401	0.183
2561-RU-120426-01-04	0.89	0.13	0.05	0.22	0.16	0.27	1.12	0.18	0.08	2.84	0.15	0.14	0.23	1.60	0.72	0.86	0.096	25780	66920	0.00389	0.107
2561-RU-120426-02-01	0.90	0.13	0.06	0.61	0.20	0.29	1.04	0.18	0.14	13.40	0.74	0.21	0.21	2.26	0.64	0.77	0.141	23000	58860	0.00339	0.137
2561-RU-120426-02-02	1.00	0.15	0.07	1.16	0.24	0.29	1.00	0.17	0.09	7.24	0.40	0.17	0.20	1.54	0.40	0.91	0.153	23000	57640	0.00328	0.144
2561-RU-120426-02-03	1.10	0.15	0.05	0.07	0.19	0.32	1.09	0.17	0.13	5.28	0.29	0.15	0.24	1.50	0.73	0.88	0.195	23000	56940	0.00321	0.180
2561-RU-120426-02-04	0.94	0.14	0.06	0.00	0.19	0.33	1.05	0.16	0.12	2.52	0.13	0.14	0.22	1.79	0.75	0.89	0.072	23000	55080	0.00303	0.063
2561-RU-120426-02-05	1.17	0.17	0.07	0.18	0.20	0.33	1.05	0.18	0.09	5.29	0.29	0.16	0.20	1.58	0.75	0.96	0.216	23000	61920	0.00368	0.229
2562-RU-120426-01-05	0.87	0.12	0.06	0.18	0.30	0.51	1.08	0.15	0.12	2.08	0.11	0.12	0.18	1.18	0.47	0.59	0.067	25780	69740	0.00416	0.080
2562-RU-120426-01-06	0.84	0.11	0.04	-0.03	0.27	0.48	1.04	0.15	0.08	2.47	0.13	0.09	0.12	1.33	0.50	0.57	0.043	25780	64980	0.00371	0.046
2562-RU-120426-01-07	0.84	0.11	0.04	0.34	0.30	0.48	1.04	0.13	0.07	1.75	0.09	0.08	0.12	1.20	0.48	0.59	0.051	25780	66560	0.00386	0.057
2562-RU-120426-01-08	0.67	0.09	0.04	0.13	0.27	0.46	0.83	0.11	0.06	9.60	0.53	0.14	0.14	1.95	0.54	0.57	0.076	25780	69340	0.00412	0.090
2562-RU-120426-01-09	1.00	0.14	0.06	0.19	0.31	0.51	1.03	0.15	0.11	2.25	0.12	0.10	0.18	1.08	0.26	0.60	0.095	25780	68560	0.00405	0.111
2562-RU-120426-02-06	0.76	0.11	0.06	0.30	0.31	0.51	0.93	0.13	0.10	3.65	0.20	0.10	0.15	1.13	0.46	0.71	0.041	23000	62800	0.00376	0.045
2562-RU-120426-02-07	0.88	0.11	0.04	0.05	0.27	0.48	1.11	0.14	0.08	4.38	0.24	0.11	0.16	1.34	0.48	0.55	0.092	23000	59120	0.00342	0.090
2562-RU-120426-02-08	0.88	0.11	0.04	0.36	0.28	0.45	0.98	0.13	0.08	11.07	0.61	0.11	0.13	2.75	0.65	0.67	0.099	23000	62400	0.00373	0.106
2562-RU-120426-02-09	0.87	0.11	0.04	0.23	0.28	0.47	1.10	0.15	0.07	1.83	0.10	0.08	0.11	0.86	0.23	0.53	0.076	23000	61180	0.00361	0.079
2575-RU-120430-01-01	0.91	0.14	0.06	0.40	0.29	0.46	1.01	0.16	0.08	7.61	0.42	0.18	0.23	1.72	0.38	0.81	0.083	25780	70440	0.00422	0.102
2575-RU-120430-01-02	0.86	0.14	0.07	0.01	0.27	0.47	0.99	0.17	0.10	6.94	0.38	0.20	0.24	2.17	0.83	0.95	0.056	25780	69800	0.00416	0.067
2575-RU-120430-01-03	0.86	0.13	0.06	0.53	0.33	0.50	1.07	0.17	0.10	4.21	0.23	0.12	0.18	1.40	0.53	0.80	0.090	25780	61240	0.00335	0.087
2575-RU-120430-01-04	0.77	0.11	0.05	1.50	0.41	0.51	0.85	0.13	0.09	7.61	0.42	0.15	0.19	1.33	0.47	0.63	0.115	25780	71940	0.00437	0.144
2575-RU-120430-02-01	1.02	0.14	0.05	0.34	0.31	0.49	1.04	0.18	0.11	10.36	0.57	0.14	0.19	2.81	0.90	0.97	0.177	23500	59320	0.00339	0.173
2575-RU-120430-02-02	0.76	0.12	0.07	0.67	0.35	0.53	1.02	0.18	0.09	12.13	0.67	0.20	0.22	2.28	0.79	0.93	0.125	23500	58880	0.00335	0.121
2575-RU-120430-02-03	1.07	0.18	0.10	0.18	0.30	0.50	1.28	0.20	0.14	2.42	0.12	0.16	0.27	2.08	0.78	0.95	0.264	23500	53840	0.00287	0.218
2575-RU-120430-02-04	0.80	0.12	0.06	2.00	0.44	0.50	0.89	0.13	0.08	7.25	0.40	0.14	0.17	1.76	0.64	0.75	0.135	23500	59120	0.00337	0.131
2576-RU-120430-01-05	0.90	0.13	0.05	0.16	0.28	0.47	1.12	0.20	0.12	4.89	0.27	0.15	0.20	0.99	0.32	0.80	0.102	25780	64800	0.00369	0.109
2576-RU-120430-01-06	0.91	0.15	0.08	0.27	0.29	0.47	0.97	0.18	0.12	5.83	0.32	0.16	0.22	1.71	0.72	0.89	0.062	25780	65920	0.00380	0.068
2576-RU-120430-02-05	0.81	0.12	0.07	0.12	0.31	0.53	1.14	0.16	0.10	2.11	0.11	0.11	0.14	1.31	0.75	0.89	0.095	23500	54720	0.00295	0.081
2576-RU-120430-02-06	0.70	0.10	0.06	0.39	0.29	0.46	0.86	0.13	0.11	8.36	0.46	0.15	0.17	2.18	0.66	0.77	0.080	23500	57160	0.00318	0.073
2576-RU-120430-02-07	0.85	0.15	0.07	0.20	0.31	0.51	0.88	0.18	0.11	4.17	0.23	0.16	0.21	0.92	0.35	0.90	0.039	23500	56460	0.00312	0.035
2619-RU-120507-01-01	0.80	0.11	0.06	-0.16	0.31	0.56	0.99	0.13	0.06	4.91	0.27	0.11	0.13	1.40	0.52	0.63	0.039	25780	63700	0.00359	0.040
2619-RU-120507-02-01	0.84	0.10	0.04	-0.05	0.33	0.57	0.96	0.12	0.07	7.24	0.40	0.11	0.12	1.24	0.50	0.60	0.052	23500	58400	0.00330	0.050
2619-RU-120507-02-02	0.91	0.11	0.04	0.08	0.31	0.54	0.96	0.13	0.07	2.14	0.11	0.10	0.16	1.26	0.41	0.52	0.029	23500	53820	0.00287	0.024
2632-RU-120508-01-01	0.69	0.09	0.05	0.38	0.31	0.49	0.94	0.14	0.06	3.40	0.19	0.09	0.12	1.11	0.45	0.54	0.043	25780	63820	0.00360	0.044

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Attachment 2 Reuse Stockpile 2 Sample Data and Calculated SOF Values																					
Sample ID	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g			Tc-99 DCGL = 25.1 pCi/g			Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g			U-234 DCGL = 195.4 pCi/g Infered Result	U-235 DCGL = 51.6 pCi/g			U-238 DCGL = 168.8 pCi/g			Sample Uniform SOF (unweighted)	Truck Tare Wt (lbs)	Loaded Truck Wt (lbs)	Weighting Factor	Weighted SOF
	Result	Error	MDC	Result	Error	MDC	Result	Error	MDC		Result	Error	MDC	Result	Error	MDC					
2632-RU-120508-01-02	0.85	0.13	0.06	-0.29	0.26	0.48	0.94	0.15	0.09	4.03	0.22	0.12	0.16	1.37	0.54	0.65	0.033	25780	60180	0.00325	0.031
2632-RU-120508-01-03	0.88	0.12	0.05	-0.11	0.31	0.54	1.06	0.14	0.09	2.79	0.15	0.09	0.13	1.58	0.53	0.62	0.056	25780	64020	0.00362	0.059
2632-RU-120508-02-01	0.77	0.10	0.05	0.16	0.32	0.54	0.93	0.12	0.08	5.32	0.29	0.10	0.12	2.36	0.56	0.62	0.053	23500	49460	0.00245	0.038
2632-RU-120508-02-02	0.77	0.11	0.06	-0.19	0.27	0.49	0.97	0.14	0.07	5.65	0.31	0.10	0.14	1.81	0.55	0.63	0.046	23500	51100	0.00261	0.034
2632-RU-120508-02-03	0.79	0.12	0.06	-0.22	0.31	0.55	1.01	0.17	0.09	3.15	0.17	0.12	0.15	1.36	0.56	0.68	0.032	23500	50960	0.00260	0.024
2633-RU-120508-01-04	0.88	0.11	0.05	0.13	0.33	0.56	0.97	0.13	0.08	4.05	0.22	0.12	0.13	1.55	0.55	0.63	0.039	25780	60680	0.00330	0.037
2633-RU-120508-01-05	0.76	0.10	0.05	0.10	0.31	0.53	0.91	0.12	0.08	3.10	0.17	0.10	0.14	0.96	0.24	0.56	0.029	25780	60220	0.00326	0.027
2633-RU-120508-02-04	0.94	0.14	0.06	-0.14	0.30	0.54	0.97	0.15	0.10	5.46	0.30	0.12	0.13	1.60	0.51	0.64	0.064	23500	49600	0.00247	0.046
2633-RU-120508-02-05	0.95	0.13	0.06	-0.05	0.30	0.52	0.89	0.13	0.08	4.41	0.24	0.10	0.13	1.65	0.58	0.66	0.063	23500	54000	0.00288	0.053
2651-RU-120509-01-02	0.81	0.10	0.04	0.68	0.33	0.49	0.90	0.12	0.07	7.79	0.43	0.11	0.13	1.69	0.30	0.58	0.085	25780	66320	0.00383	0.094
2651-RU-120509-01-03	0.98	0.13	0.05	0.33	0.27	0.43	1.09	0.16	0.08	6.52	0.36	0.11	0.14	1.23	0.30	0.67	0.148	25780	67680	0.00396	0.169
2651-RU-120509-01-04	0.89	0.12	0.05	0.11	0.27	0.46	0.94	0.12	0.08	3.70	0.20	0.11	0.14	1.45	0.47	0.57	0.036	25780	64440	0.00366	0.038
2651-RU-120509-02-06	0.85	0.11	0.04	0.22	0.29	0.47	0.91	0.12	0.06	9.60	0.53	0.12	0.14	1.58	0.57	0.64	0.078	23500	56640	0.00313	0.070
2651-RU-120509-02-07	0.84	0.11	0.05	0.30	0.29	0.47	0.95	0.13	0.05	6.34	0.35	0.11	0.14	1.21	0.26	0.56	0.058	23500	59720	0.00343	0.058
2651-RU-120509-02-08	0.81	0.12	0.06	0.25	0.29	0.48	0.84	0.13	0.09	4.78	0.26	0.11	0.15	1.78	0.58	0.65	0.050	23500	57780	0.00324	0.047
2651-RU-120509-02-09	0.93	0.11	0.04	0.15	0.31	0.53	0.99	0.13	0.07	2.46	0.13	0.09	0.11	1.22	0.48	0.58	0.044	23500	59500	0.00340	0.043
2660-RU-120510-01-01	0.88	0.11	0.04	0.14	0.31	0.53	0.97	0.12	0.09	3.09	0.16	0.10	0.14	1.60	0.47	0.57	0.034	25780	60460	0.00328	0.032
2660-RU-120510-01-02	0.90	0.11	0.05	0.85	0.38	0.55	0.96	0.13	0.07	5.03	0.28	0.10	0.14	1.24	0.26	0.53	0.072	25780	62720	0.00349	0.073
2660-RU-120510-01-03	0.95	0.13	0.06	1.90	0.41	0.46	0.94	0.14	0.10	7.61	0.42	0.14	0.15	1.66	0.54	0.63	0.159	25780	68980	0.00409	0.187
2660-RU-120510-01-04	0.81	0.10	0.04	1.51	0.39	0.49	0.85	0.12	0.06	6.89	0.38	0.11	0.13	1.72	0.52	0.58	0.113	25780	64920	0.00370	0.120
2660-RU-120510-02-01	0.96	0.12	0.05	0.32	0.31	0.51	0.94	0.12	0.08	7.24	0.40	0.13	0.14	1.44	0.51	0.61	0.098	23500	53020	0.00279	0.079
2660-RU-120510-02-02	0.96	0.13	0.06	0.15	0.27	0.46	1.09	0.15	0.09	2.11	0.11	0.11	0.18	1.37	0.44	0.58	0.104	23500	53940	0.00288	0.086
2660-RU-120510-02-03	0.91	0.13	0.06	0.12	0.29	0.50	1.02	0.15	0.10	1.21	0.06	0.11	0.19	1.10	0.46	0.61	0.034	23500	53340	0.00282	0.028
2660-RU-120510-02-04	0.82	0.10	0.04	1.42	0.44	0.58	1.00	0.15	0.08	6.91	0.38	0.11	0.12	1.95	0.58	0.61	0.111	23500	60020	0.00345	0.110
Average	0.78	0.12	0.06	0.57	0.32	0.49	0.96	0.15	0.10	6.06	0.33	0.14	0.19	1.66	0.58	0.78	0.10	-	-	-	0.10
Minimum	0.38	0.07	0.03	-0.36	0.16	0.27	0.53	0.09	0.04	1.21	0.06	0.08	0.11	0.73	0.17	0.03	0.02	-	-	-	0.02
Maximum	1.17	0.18	0.10	8.90	1.10	0.65	1.28	0.24	0.18	16.5	0.91	0.22	0.27	10.40	1.40	1.00	0.44	-	-	-	0.50

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<div>Attachment 3</div> <div>Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2</div>		

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>					
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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120126-01-01	1.08 ± 0.11 (0.19)	0.73 ± 0.17 (0.25)	8.62	0.27 ± 0.26 (0.43)	*(9.27)	0.10
0000-TR-120126-01-02	0.93 ± 0.11 (0.20)	0.83 ± 0.19 (0.25)	16.58	0.51 ± 0.25 (0.40)	*(9.23)	0.02
0000-TR-120514-01-01	0.93 ± 0.14 (0.25)	0.86 ± 0.17 (0.31)	*0.00	*(0.53)	*(10.14)	0.02
0000-TR-120514-01-02	0.74 ± 0.13 (0.23)	0.95 ± 0.20 (0.30)	*0.00	*(0.48)	*(9.82)	0.00
0000-TR-120514-01-03	0.79 ± 0.17 (0.22)	1.26 ± 0.17 (0.26)	*0.00	*(0.52)	*(9.64)	0.13
0000-TR-120514-01-04	0.60 ± 0.14 (0.24)	0.00 ± 0.00 (0.46)	*0.00	*(0.52)	*(9.35)	0.00
0000-TR-120514-01-05	0.72 ± 0.12 (0.20)	0.88 ± 0.17 (0.28)	6.69	0.21 ± 0.22 (0.34)	*(8.83)	0.00
0000-TR-120514-01-06	0.85 ± 0.14 (0.23)	1.15 ± 0.20 (0.35)	*0.00	*(0.58)	*(10.59)	0.07
0000-TR-120514-01-07	0.74 ± 0.14 (0.20)	1.01 ± 0.18 (0.31)	*0.00	*(0.54)	*(9.37)	0.00
0000-TR-120514-01-08	0.74 ± 0.13 (0.24)	1.12 ± 0.20 (0.28)	11.05	0.34 ± 0.25 (0.35)	*(9.64)	0.07
0000-TR-120514-01-09	0.77 ± 0.14 (0.22)	1.13 ± 0.20 (0.33)	*0.00	*(0.57)	*(10.06)	0.07
0000-TR-120514-01-10	0.99 ± 0.14 (0.13)	0.96 ± 0.20 (0.38)	7.41	0.23 ± 0.24 (0.35)	*(11.19)	0.05
0000-TR-120514-02-01	0.90 ± 0.12 (0.25)	0.00 ± 0.00 (0.46)	*0.00	*(0.50)	*(10.37)	0.00
0000-TR-120514-02-02	1.02 ± 0.14 (0.22)	0.84 ± 0.18 (0.26)	*0.00	*(0.48)	*(8.57)	0.06
0000-TR-120514-02-03	0.57 ± 0.12 (0.21)	0.00 ± 0.00 (0.46)	*0.00	*(0.50)	*(9.92)	0.00
0000-TR-120514-02-04	0.70 ± 0.11 (0.20)	0.90 ± 0.21 (0.29)	*0.00	*(0.30)	*(8.88)	0.00
0000-TR-120514-02-05	0.75 ± 0.11 (0.19)	0.00 ± 0.00 (0.46)	9.79	0.30 ± 0.23 (0.38)	*(8.90)	0.01
0000-TR-120514-02-06	0.70 ± 0.11 (0.23)	0.00 ± 0.00 (0.45)	*0.00	*(0.47)	*(9.60)	0.00
0000-TR-120514-02-07	0.71 ± 0.10 (0.21)	0.96 ± 0.22 (0.27)	*0.00	*(0.47)	*(9.21)	0.00
0000-TR-120514-02-08	0.79 ± 0.11 (0.26)	0.73 ± 0.19 (0.33)	*0.00	*(0.48)	*(10.41)	0.00
0000-TR-120514-02-09	0.66 ± 0.10 (0.23)	0.00 ± 0.00 (0.47)	8.64	0.27 ± 0.28 (0.46)	*(9.70)	0.01
0000-TR-120514-02-10	0.76 ± 0.13 (0.24)	0.87 ± 0.20 (0.31)	5.70	0.18 ± 0.20 (0.33)	*(9.90)	0.00
0000-TR-120515-01-01	0.81 ± 0.13 (0.18)	0.90 ± 0.16 (0.27)	15.62	0.48 ± 0.30 (0.39)	*(9.46)	0.01
0000-TR-120515-01-02	0.65 ± 0.14 (0.20)	0.99 ± 0.15 (0.32)	*0.00	*(0.53)	*(9.63)	0.00
0000-TR-120515-01-03	0.83 ± 0.14 (0.22)	1.04 ± 0.19 (0.32)	*0.00	*(0.44)	*(10.31)	0.02
0000-TR-120515-01-04	0.95 ± 0.17 (0.23)	1.05 ± 0.15 (0.28)	*0.00	*(0.50)	*(9.27)	0.05
0000-TR-120515-01-05	0.79 ± 0.17 (0.21)	1.09 ± 0.18 (0.30)	8.40	0.26 ± 0.25 (0.37)	*(9.87)	0.05
0000-TR-120515-02-01	1.09 ± 0.12 (0.20)	0.73 ± 0.19 (0.36)	13.10	0.40 ± 0.25 (0.40)	*(9.95)	0.11

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120515-02-02	1.05 ± 0.13 (0.21)	0.00 ± 0.00 (0.44)	10.75	0.33 ± 0.28 (0.46)	*(10.65)	0.08
0000-TR-120515-02-03	0.97 ± 0.13 (0.24)	0.82 ± 0.18 (0.31)	*0.00	*(0.49)	*(9.81)	0.04
0000-TR-120515-02-04	0.83 ± 0.11 (0.17)	0.74 ± 0.20 (0.35)	*0.00	*(0.46)	*(9.14)	0.00
0000-TR-120515-02-05	0.80 ± 0.11 (0.17)	0.92 ± 0.20 (0.31)	*0.00	*(0.49)	*(9.11)	0.00
0000-TR-120516-01-03	0.93 ± 0.19 (0.24)	1.12 ± 0.19 (0.32)	*0.00	*(0.56)	*(10.52)	0.07
0000-TR-120516-01-04	0.88 ± 0.13 (0.20)	1.06 ± 0.17 (0.27)	14.86	0.46 ± 0.37 (0.53)	*(10.38)	0.04
0000-TR-120516-01-05	0.75 ± 0.13 (0.21)	1.33 ± 0.21 (0.31)	*0.00	*(0.54)	*(9.37)	0.17
0000-TR-120516-02-04	0.70 ± 0.12 (0.22)	0.00 ± 0.00 (0.49)	11.78	0.36 ± 0.25 (0.41)	*(10.46)	0.01
0000-TR-120516-02-05	0.85 ± 0.12 (0.20)	1.05 ± 0.19 (0.30)	18.67	0.57 ± 0.30 (0.48)	*(9.75)	0.03
0000-TR-120516-02-06	0.69 ± 0.10 (0.18)	0.91 ± 0.16 (0.25)	9.49	0.29 ± 0.25 (0.42)	*(10.24)	0.01
0000-TR-120521-01-01	1.07 ± 0.19 (0.23)	1.10 ± 0.14 (0.26)	*0.00	*(0.54)	*(10.02)	0.14
0000-TR-120521-01-02	0.80 ± 0.13 (0.21)	1.01 ± 0.17 (0.25)	7.12	0.22 ± 0.24 (0.36)	*(9.30)	0.01
0000-TR-120521-01-03	0.82 ± 0.13 (0.22)	1.04 ± 0.18 (0.31)	7.03	0.22 ± 0.25 (0.39)	*(8.70)	0.02
0000-TR-120521-01-04	0.72 ± 0.17 (0.25)	1.12 ± 0.19 (0.33)	*0.00	*(0.35)	*(10.04)	0.06
0000-TR-120521-01-05	0.80 ± 0.15 (0.27)	1.05 ± 0.22 (0.40)	*0.00	*(0.63)	*(11.30)	0.02
0000-TR-120521-01-06	0.70 ± 0.12 (0.18)	1.09 ± 0.17 (0.31)	19.44	0.60 ± 0.36 (0.44)	*(10.01)	0.06
0000-TR-120521-01-07	0.78 ± 0.13 (0.20)	0.89 ± 0.17 (0.33)	29.29	0.90 ± 0.45 (0.48)	*(9.32)	0.02
0000-TR-120521-01-08	0.89 ± 0.13 (0.18)	0.90 ± 0.19 (0.34)	*0.00	*(0.54)	*(9.54)	0.00
0000-TR-120521-01-09	0.75 ± 0.17 (0.23)	0.00 ± 0.00 (0.47)	22.00	0.68 ± 0.37 (0.43)	*(9.86)	0.01
0000-TR-120521-01-10	0.82 ± 0.13 (0.20)	0.99 ± 0.18 (0.31)	11.36	0.35 ± 0.32 (0.47)	*(9.50)	0.01
0000-TR-120521-02-01	0.77 ± 0.12 (0.25)	0.00 ± 0.00 (0.47)	*0.00	*(0.49)	*(9.50)	0.00
0000-TR-120521-02-02	0.79 ± 0.11 (0.19)	0.00 ± 0.00 (0.45)	*0.00	*(0.48)	*(9.13)	0.00
0000-TR-120521-02-03	0.78 ± 0.12 (0.20)	0.72 ± 0.18 (0.29)	9.20	0.28 ± 0.29 (0.48)	*(9.81)	0.01
0000-TR-120521-02-04	0.71 ± 0.10 (0.20)	0.00 ± 0.00 (0.45)	*0.00	*(0.48)	*(10.27)	0.00
0000-TR-120521-02-05	0.71 ± 0.11 (0.18)	0.92 ± 0.20 (0.28)	*0.00	*(0.49)	3.09 ± 3.39 (5.56)	0.02
0000-TR-120521-02-06	0.75 ± 0.11 (0.21)	0.00 ± 0.00 (0.42)	17.58	0.54 ± 0.25 (0.40)	*(9.13)	0.01
0000-TR-120521-02-07	0.62 ± 0.10 (0.19)	0.85 ± 0.16 (0.26)	14.21	0.44 ± 0.28 (0.46)	*(10.07)	0.01
0000-TR-120521-02-08	0.77 ± 0.10 (0.18)	0.79 ± 0.19 (0.31)	12.38	0.38 ± 0.21 (0.34)	*(9.77)	0.01

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120521-02-09	0.79 ± 0.12 (0.21)	0.00 ± 0.00 (0.48)	*0.00	*(0.50)	*(9.09)	0.00
0000-TR-120521-02-10	0.64 ± 0.12 (0.23)	0.00 ± 0.00 (0.42)	*0.00	*(0.45)	*(9.05)	0.00
0000-TR-120522-01-01	0.98 ± 0.14 (0.17)	1.18 ± 0.20 (0.29)	13.29	0.41 ± 0.34 (0.50)	*(10.45)	0.14
0000-TR-120522-01-02	0.99 ± 0.19 (0.24)	0.96 ± 0.18 (0.34)	*0.00	*(0.44)	*(9.44)	0.05
0000-TR-120522-01-03	0.93 ± 0.14 (0.18)	1.04 ± 0.20 (0.35)	*0.00	*(0.55)	*(9.86)	0.03
0000-TR-120522-01-04	0.93 ± 0.13 (0.17)	0.00 ± 0.00 (0.47)	*0.00	*(0.54)	*(10.11)	0.01
0000-TR-120522-01-05	0.79 ± 0.16 (0.23)	1.14 ± 0.18 (0.29)	15.84	0.49 ± 0.36 (0.50)	*(10.18)	0.08
0000-TR-120522-01-06	0.70 ± 0.12 (0.20)	1.01 ± 0.18 (0.31)	15.93	0.49 ± 0.50 (0.78)	*(9.55)	0.01
0000-TR-120522-01-07	0.78 ± 0.13 (0.20)	0.00 ± 0.00 (0.45)	16.28	0.50 ± 0.33 (0.44)	*(9.95)	0.01
0000-TR-120522-01-08	0.71 ± 0.13 (0.22)	1.18 ± 0.19 (0.31)	*0.00	*(0.55)	*(9.88)	0.09
0000-TR-120522-01-09	0.87 ± 0.13 (0.14)	1.01 ± 0.17 (0.32)	11.91	0.37 ± 0.31 (0.45)	*(9.16)	0.01
0000-TR-120522-02-01	1.09 ± 0.11 (0.16)	0.79 ± 0.18 (0.27)	5.53	0.17 ± 0.20 (0.32)	*(10.38)	0.10
0000-TR-120522-02-02	0.96 ± 0.12 (0.22)	0.00 ± 0.00 (0.44)	7.42	0.23 ± 0.21 (0.35)	*(9.17)	0.04
0000-TR-120522-02-03	0.91 ± 0.11 (0.19)	0.00 ± 0.00 (0.45)	*0.00	*(0.48)	*(9.75)	0.01
0000-TR-120522-02-04	0.69 ± 0.10 (0.21)	0.00 ± 0.00 (0.43)	12.31	0.38 ± 0.24 (0.39)	*(10.22)	0.01
0000-TR-120522-02-05	0.73 ± 0.11 (0.19)	0.81 ± 0.18 (0.29)	10.65	0.33 ± 0.23 (0.37)	*(9.63)	0.01
0000-TR-120522-02-06	0.78 ± 0.11 (0.20)	0.79 ± 0.20 (0.33)	5.79	0.18 ± 0.16 (0.26)	*(8.74)	0.00
0000-TR-120522-02-07	0.67 ± 0.10 (0.20)	0.00 ± 0.00 (0.44)	13.79	0.42 ± 0.24 (0.39)	*(9.24)	0.01
0000-TR-120522-02-08	0.72 ± 0.10 (0.20)	0.00 ± 0.00 (0.44)	*0.00	*(0.48)	*(8.90)	0.00
0000-TR-120529-01-01	0.81 ± 0.13 (0.21)	1.10 ± 0.17 (0.25)	*0.00	*(0.51)	*(9.70)	0.05
0000-TR-120529-01-02	0.87 ± 0.13 (0.20)	1.10 ± 0.17 (0.29)	9.56	0.29 ± 0.32 (0.49)	*(9.78)	0.05
0000-TR-120529-01-03	0.76 ± 0.13 (0.23)	1.07 ± 0.15 (0.32)	9.74	0.30 ± 0.29 (0.43)	*(9.92)	0.04
0000-TR-120529-01-04	0.86 ± 0.13 (0.21)	1.10 ± 0.14 (0.29)	*0.00	*(0.50)	*(9.64)	0.05
0000-TR-120529-01-05	0.74 ± 0.14 (0.19)	0.95 ± 0.14 (0.32)	*0.00	*(0.50)	*(8.80)	0.00
0000-TR-120529-02-01	0.88 ± 0.11 (0.21)	0.88 ± 0.19 (0.28)	*0.00	*(0.45)	*(8.41)	0.00
0000-TR-120529-02-02	0.78 ± 0.10 (0.20)	0.80 ± 0.19 (0.29)	*0.00	*(0.49)	*(9.96)	0.00
0000-TR-120529-02-03	0.79 ± 0.11 (0.21)	0.96 ± 0.17 (0.32)	*0.00	*(0.46)	*(8.82)	0.00
0000-TR-120529-02-04	0.83 ± 0.11 (0.20)	0.94 ± 0.25 (0.27)	*0.00	*(0.46)	*(8.98)	0.00

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120529-02-05	0.74 ± 0.10 (0.19)	0.76 ± 0.18 (0.28)	*0.00	*(0.48)	*(8.83)	0.00
0000-TR-120529-02-06	0.73 ± 0.10 (0.20)	0.99 ± 0.17 (0.28)	9.95	0.31 ± 0.24 (0.39)	*(9.70)	0.01
0000-TR-120530-01-01	1.11 ± 0.14 (0.19)	1.09 ± 0.18 (0.33)	8.95	0.28 ± 0.29 (0.44)	*(10.01)	0.16
0000-TR-120530-01-02	0.91 ± 0.14 (0.18)	1.16 ± 0.15 (0.30)	10.54	0.32 ± 0.30 (0.44)	*(9.57)	0.09
0000-TR-120530-01-03	0.83 ± 0.13 (0.23)	1.09 ± 0.15 (0.29)	14.82	0.46 ± 0.32 (0.43)	*(10.13)	0.05
0000-TR-120530-01-04	0.84 ± 0.13 (0.23)	1.14 ± 0.18 (0.32)	18.97	0.58 ± 0.33 (0.39)	*(9.76)	0.08
0000-TR-120530-01-05	0.78 ± 0.12 (0.15)	0.99 ± 0.17 (0.30)	*0.00	*(0.52)	*(8.92)	0.00
0000-TR-120530-01-06	0.69 ± 0.13 (0.24)	0.00 ± 0.00 (0.46)	6.68	0.21 ± 0.21 (0.31)	*(9.82)	0.00
0000-TR-120530-01-07	0.77 ± 0.15 (0.18)	0.95 ± 0.16 (0.30)	17.67	0.54 ± 0.31 (0.37)	*(9.27)	0.01
0000-TR-120530-02-01	0.95 ± 0.11 (0.19)	0.00 ± 0.00 (0.46)	10.57	0.33 ± 0.23 (0.37)	*(9.96)	0.03
0000-TR-120530-02-02	0.79 ± 0.12 (0.24)	0.93 ± 0.19 (0.31)	11.33	0.35 ± 0.27 (0.44)	*(9.88)	0.01
0000-TR-120530-02-03	0.79 ± 0.11 (0.21)	0.81 ± 0.18 (0.30)	7.55	0.23 ± 0.20 (0.32)	*(9.74)	0.00
0000-TR-120530-02-04	0.73 ± 0.12 (0.19)	0.95 ± 0.18 (0.25)	15.52	0.48 ± 0.24 (0.38)	*(9.93)	0.01
0000-TR-120530-02-05	0.82 ± 0.11 (0.17)	1.00 ± 0.17 (0.27)	*0.00	*(0.49)	*(9.58)	0.00
0000-TR-120530-02-06	0.68 ± 0.10 (0.17)	0.75 ± 0.15 (0.30)	15.84	0.49 ± 0.24 (0.39)	*(9.09)	0.01
0000-TR-120530-02-07	0.54 ± 0.10 (0.23)	0.83 ± 0.18 (0.26)	*0.00	*(0.45)	*(8.87)	0.00
0000-TR-120531-01-01	1.01 ± 0.14 (0.22)	1.00 ± 0.14 (0.27)	22.40	0.69 ± 0.37 (0.41)	*(9.88)	0.07
0000-TR-120531-01-02	0.98 ± 0.14 (0.19)	1.14 ± 0.15 (0.30)	8.47	0.26 ± 0.25 (0.36)	*(9.45)	0.12
0000-TR-120531-01-03	1.30 ± 0.16 (0.23)	1.04 ± 0.19 (0.34)	*0.00	*(0.55)	*(9.95)	0.23
0000-TR-120531-02-01	0.84 ± 0.10 (0.18)	0.00 ± 0.00 (0.45)	*0.00	*(0.48)	*(9.73)	0.00
0000-TR-120531-02-02	1.44 ± 0.13 (0.23)	0.00 ± 0.00 (0.48)	*0.00	*(0.51)	*(10.40)	0.28
0000-TR-120531-02-03	1.74 ± 0.16 (0.24)	0.00 ± 0.00 (0.49)	*0.00	*(0.55)	*(10.57)	0.44
0000-TR-120531-02-04	1.11 ± 0.12 (0.22)	0.98 ± 0.21 (0.32)	*0.00	*(0.50)	*(10.30)	0.11
0000-TR-120604-01-01	1.15 ± 0.15 (0.20)	1.17 ± 0.15 (0.28)	16.04	0.49 ± 0.33 (0.43)	*(10.37)	0.23
0000-TR-120604-01-02	0.99 ± 0.15 (0.22)	1.06 ± 0.17 (0.25)	16.30	0.50 ± 0.37 (0.51)	*(10.40)	0.09
0000-TR-120604-01-03	0.86 ± 0.14 (0.22)	0.84 ± 0.14 (0.34)	20.77	0.64 ± 0.37 (0.45)	*(9.79)	0.01
0000-TR-120604-01-04	0.93 ± 0.14 (0.21)	0.96 ± 0.18 (0.31)	9.86	0.30 ± 0.30 (0.44)	*(10.32)	0.02
0000-TR-120604-01-05	0.84 ± 0.12 (0.23)	1.02 ± 0.14 (0.28)	8.69	0.27 ± 0.24 (0.36)	*(9.97)	0.02

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120604-01-06	0.88 ± 0.13 (0.21)	1.02 ± 0.19 (0.32)	21.83	0.67 ± 0.41 (0.52)	*(10.19)	0.02
0000-TR-120604-01-07	0.90 ± 0.14 (0.24)	1.01 ± 0.20 (0.35)	*0.00	*(0.55)	*(9.91)	0.01
0000-TR-120604-01-08	0.96 ± 0.14 (0.20)	1.22 ± 0.16 (0.29)	*0.00	*(0.56)	*(9.78)	0.14
0000-TR-120604-01-09	1.04 ± 0.14 (0.21)	1.15 ± 0.20 (0.37)	*0.00	*(0.58)	*(10.40)	0.15
0000-TR-120604-02-01	1.07 ± 0.12 (0.21)	1.02 ± 0.21 (0.31)	*0.00	*(0.50)	*(9.92)	0.10
0000-TR-120604-02-02	0.96 ± 0.11 (0.22)	0.99 ± 0.20 (0.29)	20.24	0.62 ± 0.29 (0.46)	*(9.67)	0.04
0000-TR-120604-02-03	1.01 ± 0.11 (0.16)	0.91 ± 0.19 (0.29)	10.76	0.33 ± 0.19 (0.31)	*(9.72)	0.06
0000-TR-120604-02-04	0.87 ± 0.11 (0.21)	0.92 ± 0.20 (0.33)	*0.00	*(0.33)	*(9.42)	0.00
0000-TR-120604-02-05	0.81 ± 0.10 (0.20)	0.00 ± 0.00 (0.45)	*0.00	*(0.48)	*(9.62)	0.00
0000-TR-120604-02-06	0.81 ± 0.11 (0.20)	0.00 ± 0.00 (0.47)	11.65	0.36 ± 0.25 (0.41)	*(9.09)	0.01
0000-TR-120604-02-07	0.95 ± 0.11 (0.21)	0.83 ± 0.16 (0.31)	13.95	0.43 ± 0.23 (0.37)	*(10.14)	0.03
0000-TR-120604-02-08	0.90 ± 0.11 (0.23)	0.97 ± 0.20 (0.28)	*0.00	*(0.50)	*(10.08)	0.00
0000-TR-120605-01-01	0.84 ± 0.14 (0.28)	1.17 ± 0.19 (0.33)	*0.00	*(0.55)	*(10.12)	0.08
0000-TR-120605-01-02	0.93 ± 0.14 (0.22)	1.06 ± 0.19 (0.34)	*0.00	*(0.56)	*(10.48)	0.04
0000-TR-120605-01-03	0.97 ± 0.14 (0.23)	1.14 ± 0.16 (0.33)	*0.00	*(0.56)	*(10.28)	0.10
0000-TR-120605-01-04	0.92 ± 0.14 (0.22)	0.00 ± 0.00 (0.52)	*0.00	*(0.58)	*(10.95)	0.01
0000-TR-120605-01-05	0.93 ± 0.14 (0.24)	1.12 ± 0.19 (0.32)	10.16	0.31 ± 0.30 (0.44)	*(11.14)	0.08
0000-TR-120605-01-06	0.97 ± 0.16 (0.29)	1.22 ± 0.21 (0.33)	*0.00	*(0.64)	*(11.72)	0.15
0000-TR-120611-01-01	0.88 ± 0.15 (0.23)	1.00 ± 0.17 (0.29)	*0.00	*(0.56)	*(10.44)	0.00
0000-TR-120611-01-02	1.15 ± 0.16 (0.22)	1.27 ± 0.21 (0.31)	*0.00	*(0.55)	*(10.74)	0.26
0000-TR-120611-01-03	0.91 ± 0.14 (0.22)	0.99 ± 0.18 (0.31)	13.50	0.42 ± 0.34 (0.49)	*(10.19)	0.01
0000-TR-120611-02-01	0.94 ± 0.12 (0.21)	0.96 ± 0.21 (0.34)	*0.00	*(0.50)	*(10.50)	0.02
0000-TR-120611-02-02	1.61 ± 0.15 (0.23)	1.09 ± 0.21 (0.30)	*0.00	*(0.52)	*(10.44)	0.42
0000-TR-120611-02-03	0.94 ± 0.12 (0.22)	1.08 ± 0.17 (0.30)	7.69	0.24 ± 0.22 (0.36)	*(10.37)	0.07
0000-TR-120612-01-01	0.96 ± 0.19 (0.26)	1.10 ± 0.21 (0.35)	13.36	0.41 ± 0.34 (0.50)	*(9.75)	0.09
0000-TR-120612-01-02	1.03 ± 0.14 (0.21)	1.07 ± 0.17 (0.29)	15.27	0.47 ± 0.32 (0.42)	*(10.00)	0.11
0000-TR-120612-01-03	0.78 ± 0.14 (0.27)	1.10 ± 0.17 (0.31)	10.82	0.33 ± 0.32 (0.48)	*(11.04)	0.06
0000-TR-120612-01-04	0.92 ± 0.14 (0.23)	1.08 ± 0.18 (0.31)	13.25	0.41 ± 0.34 (0.50)	*(10.30)	0.06

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120612-01-05	1.00 ± 0.13 (0.14)	0.00 ± 0.00 (0.48)	*0.00	*(0.55)	*(10.51)	0.05
0000-TR-120612-01-06	0.85 ± 0.13 (0.14)	0.96 ± 0.20 (0.34)	10.36	0.32 ± 0.30 (0.45)	*(9.92)	0.01
0000-TR-120612-01-07	0.78 ± 0.13 (0.23)	0.71 ± 0.18 (0.35)	*0.00	*(0.55)	*(10.15)	0.00
0000-TR-120612-01-08	0.80 ± 0.14 (0.25)	0.82 ± 0.19 (0.33)	*0.00	*(0.56)	*(10.04)	0.00
0000-TR-120612-01-09	0.85 ± 0.17 (0.23)	0.00 ± 0.00 (0.46)	17.19	0.53 ± 0.34 (0.44)	*(10.27)	0.01
0000-TR-120612-02-01	0.93 ± 0.13 (0.23)	0.87 ± 0.19 (0.26)	7.88	0.24 ± 0.25 (0.41)	*(10.35)	0.02
0000-TR-120612-02-02	0.84 ± 0.13 (0.21)	0.92 ± 0.19 (0.28)	*0.00	*(0.51)	*(9.45)	0.00
0000-TR-120612-02-03	0.87 ± 0.10 (0.20)	0.81 ± 0.17 (0.26)	21.00	0.65 ± 0.29 (0.46)	*(9.89)	0.01
0000-TR-120612-02-04	0.83 ± 0.11 (0.22)	0.88 ± 0.20 (0.31)	*0.00	*(0.48)	*(8.96)	0.00
0000-TR-120612-02-05	0.96 ± 0.12 (0.21)	0.93 ± 0.19 (0.29)	*0.00	*(0.48)	*(9.63)	0.03
0000-TR-120612-02-06	0.66 ± 0.11 (0.21)	0.00 ± 0.00 (0.47)	*0.00	*(0.51)	*(9.78)	0.00
0000-TR-120612-02-07	0.82 ± 0.11 (0.24)	0.81 ± 0.18 (0.31)	17.10	0.53 ± 0.27 (0.43)	*(10.50)	0.01
0000-TR-120612-02-08	0.89 ± 0.11 (0.16)	0.82 ± 0.17 (0.26)	13.67	0.42 ± 0.24 (0.38)	*(10.42)	0.01
0000-TR-120612-02-09	0.82 ± 0.11 (0.23)	0.88 ± 0.19 (0.28)	11.00	0.34 ± 0.24 (0.39)	*(9.99)	0.01
0000-TR-120618-01-01	0.94 ± 0.18 (0.25)	0.99 ± 0.16 (0.35)	*0.00	*(0.55)	*(8.92)	0.02
0000-TR-120618-01-02	0.68 ± 0.13 (0.23)	1.02 ± 0.17 (0.28)	*0.00	*(0.34)	*(10.82)	0.01
0000-TR-120618-01-03	0.84 ± 0.13 (0.22)	1.15 ± 0.21 (0.31)	*0.00	*(0.40)	*(10.58)	0.07
0000-TR-120618-01-04	0.91 ± 0.14 (0.21)	1.18 ± 0.19 (0.34)	13.49	0.42 ± 0.33 (0.47)	*(10.80)	0.10
0000-TR-120618-01-05	0.75 ± 0.13 (0.23)	1.24 ± 0.22 (0.32)	0.00	*(0.55)	*(10.57)	0.12
0000-TR-120618-01-06	0.79 ± 0.14 (0.22)	1.00 ± 0.18 (0.31)	11.34	0.35 ± 0.29 (0.42)	*(10.11)	0.01
0000-TR-120618-01-07	0.94 ± 0.17 (0.23)	0.80 ± 0.15 (0.32)	22.85	0.70 ± 0.38 (0.46)	*(9.93)	0.04
0000-TR-120618-01-08	0.82 ± 0.14 (0.24)	1.11 ± 0.19 (0.31)	*0.00	*(0.40)	*(10.49)	0.05
0000-TR-120618-01-09	0.80 ± 0.14 (0.22)	1.01 ± 0.20 (0.31)	7.23	0.22 ± 0.24 (0.37)	*(9.85)	0.01
0000-TR-120618-01-10	0.86 ± 0.13 (0.21)	1.07 ± 0.21 (0.33)	11.76	0.36 ± 0.30 (0.44)	*(9.70)	0.04
0000-TR-120618-01-11	0.84 ± 0.17 (0.21)	1.16 ± 0.19 (0.35)	19.16	0.59 ± 0.41 (0.57)	*(10.57)	0.09
0000-TR-120618-02-01	0.71 ± 0.10 (0.20)	0.80 ± 0.18 (0.31)	9.12	0.28 ± 0.23 (0.37)	*(9.66)	0.01
0000-TR-120618-02-02	0.76 ± 0.11 (0.23)	0.00 ± 0.00 (0.46)	13.62	0.42 ± 0.24 (0.39)	*(9.36)	0.01
0000-TR-120618-02-03	0.84 ± 0.11 (0.21)	0.85 ± 0.20 (0.34)	*0.00	*(0.51)	*(9.99)	0.00

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120618-02-04	0.88 ± 0.11 (0.20)	0.00 ± 0.00 (0.49)	7.63	0.23 ± 0.19 (0.32)	*(10.13)	0.00
0000-TR-120618-02-05	0.73 ± 0.10 (0.22)	0.97 ± 0.20 (0.30)	6.50	0.20 ± 0.20 (0.33)	*(10.63)	0.00
0000-TR-120618-02-06	0.80 ± 0.12 (0.21)	0.90 ± 0.16 (0.26)	12.69	0.39 ± 0.24 (0.39)	*(10.61)	0.01
0000-TR-120618-02-07	0.71 ± 0.12 (0.21)	0.96 ± 0.20 (0.30)	*0.00	*(0.52)	*(10.72)	0.00
0000-TR-120618-02-08	0.75 ± 0.11 (0.19)	1.02 ± 0.25 (0.23)	14.10	0.43 ± 0.28 (0.46)	*(10.24)	0.02
0000-TR-120618-02-09	0.71 ± 0.11 (0.21)	0.98 ± 0.20 (0.30)	4.94	0.15 ± 0.18 (0.29)	*(10.40)	0.00
0000-TR-120618-02-10	0.78 ± 0.13 (0.24)	0.87 ± 0.18 (0.26)	16.27	0.50 ± 0.25 (0.40)	*(9.81)	0.01
0000-TR-120619-02-01	0.79 ± 0.13 (0.23)	0.93 ± 0.20 (0.31)	11.90	0.37 ± 0.23 (0.37)	*(9.88)	0.01
0000-TR-120619-02-02	0.82 ± 0.11 (0.20)	0.00 ± 0.00 (0.47)	4.85	0.22 ± 0.25 (0.41)	5.75 ± 3.87 (5.85)	0.04
0000-TR-120619-02-03	0.70 ± 0.12 (0.21)	0.79 ± 0.17 (0.26)	16.90	0.52 ± 0.28 (0.45)	*(10.15)	0.01
0000-TR-120619-02-04	0.82 ± 0.11 (0.19)	0.81 ± 0.19 (0.32)	15.42	0.47 ± 0.22 (0.35)	*(10.28)	0.01
0000-TR-120619-02-05	0.78 ± 0.10 (0.19)	0.83 ± 0.19 (0.30)	15.41	0.47 ± 0.22 (0.36)	*(8.89)	0.01
0000-TR-120619-02-06	0.73 ± 0.10 (0.21)	0.88 ± 0.20 (0.29)	15.72	0.48 ± 0.24 (0.39)	*(10.10)	0.01
0000-TR-120625-01-01	0.93 ± 0.13 (0.20)	1.09 ± 0.19 (0.31)	12.94	0.40 ± 0.33 (0.48)	*(10.46)	0.07
0000-TR-120625-01-02	0.94 ± 0.14 (0.21)	1.15 ± 0.18 (0.26)	7.02	0.22 ± 0.21 (0.31)	*(9.91)	0.10
0000-TR-120625-01-03	0.95 ± 0.16 (0.28)	1.01 ± 0.18 (0.32)	15.79	0.49 ± 0.30 (0.37)	*(9.66)	0.04
0000-TR-120625-01-04	0.76 ± 0.14 (0.24)	1.02 ± 0.20 (0.34)	13.72	0.42 ± 0.31 (0.44)	*(10.49)	0.02
0000-TR-120625-01-05	0.92 ± 0.14 (0.21)	1.15 ± 0.21 (0.30)	*0.00	*(0.58)	*(11.04)	0.08
0000-TR-120626-01-01	0.95 ± 0.15 (0.19)	1.02 ± 0.20 (0.33)	13.29	0.41 ± 0.36 (0.53)	*(10.16)	0.04
0000-TR-120626-01-02	0.97 ± 0.19 (0.23)	1.06 ± 0.19 (0.34)	*0.00	*(0.56)	*(10.36)	0.07
0000-TR-120626-01-03	1.03 ± 0.14 (0.23)	1.26 ± 0.19 (0.31)	*0.00	*(0.56)	*(10.00)	0.20
0000-TR-120626-01-04	0.85 ± 0.13 (0.20)	0.92 ± 0.14 (0.29)	8.09	0.25 ± 0.29 (0.45)	*(9.89)	0.00
0000-TR-120626-01-05	0.80 ± 0.13 (0.18)	1.01 ± 0.18 (0.33)	15.65	0.48 ± 0.33 (0.44)	*(10.12)	0.01
0000-TR-120626-01-06	0.89 ± 0.13 (0.19)	1.16 ± 0.18 (0.32)	17.64	0.54 ± 0.36 (0.49)	*(9.86)	0.09
0000-TR-120626-01-07	1.02 ± 0.14 (0.16)	1.03 ± 0.19 (0.33)	14.74	0.45 ± 0.37 (0.54)	*(10.48)	0.08
0000-TR-120626-01-08	0.82 ± 0.14 (0.20)	1.12 ± 0.19 (0.32)	19.18	0.59 ± 0.36 (0.46)	*(10.52)	0.07
0000-TR-120626-01-09	0.75 ± 0.13 (0.19)	1.10 ± 0.18 (0.26)	*0.00	*(0.55)	*(10.24)	0.05
0000-TR-120626-01-10	0.92 ± 0.14 (0.23)	1.09 ± 0.16 (0.34)	*0.00	*(0.56)	*(10.07)	0.06

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120626-01-11	0.94 ± 0.19 (0.24)	1.24 ± 0.19 (0.27)	9.79	0.30 ± 0.30 (0.45)	*(10.39)	0.15
0000-TR-120626-02-01	0.85 ± 0.12 (0.24)	0.96 ± 0.21 (0.29)	*0.00	*(0.50)	*(10.78)	0.00
0000-TR-120626-02-02	0.91 ± 0.10 (0.19)	1.03 ± 0.20 (0.30)	*0.00	*(0.48)	*(9.17)	0.02
0000-TR-120626-02-03	0.88 ± 0.11 (0.22)	0.87 ± 0.20 (0.35)	*0.00	*(0.49)	*(9.57)	0.00
0000-TR-120626-02-04	0.80 ± 0.10 (0.19)	0.98 ± 0.21 (0.31)	9.89	0.30 ± 0.25 (0.41)	*(9.09)	0.01
0000-TR-120626-02-05	0.78 ± 0.11 (0.21)	0.94 ± 0.18 (0.31)	8.64	0.27 ± 0.27 (0.45)	*(10.78)	0.01
0000-TR-120626-02-06	0.80 ± 0.11 (0.20)	1.04 ± 0.22 (0.31)	*0.00	*(0.51)	*(9.83)	0.02
0000-TR-120626-02-07	0.80 ± 0.11 (0.17)	0.88 ± 0.19 (0.28)	7.99	0.25 ± 0.28 (0.35)	*(9.92)	0.00
0000-TR-120626-02-08	0.83 ± 0.12 (0.23)	0.00 ± 0.00 (0.47)	*0.00	*(0.50)	*(10.55)	0.00
0000-TR-120626-02-09	0.71 ± 0.11 (0.21)	0.99 ± 0.19 (0.31)	7.23	0.22 ± 0.21 (0.35)	*(10.50)	0.00
0000-TR-120626-02-10	0.84 ± 0.12 (0.21)	0.81 ± 0.20 (0.31)	*0.00	*(0.50)	*(9.69)	0.00
0000-TR-120703-01-01	0.89 ± 0.17 (0.24)	1.06 ± 0.18 (0.30)	11.68	0.36 ± 0.28 (0.41)	*(9.42)	0.04
0000-TR-120703-01-02	0.74 ± 0.13 (0.19)	1.09 ± 0.15 (0.26)	*0.00	*(0.54)	*(10.15)	0.04
0000-TR-120703-01-03	1.04 ± 0.15 (0.23)	1.21 ± 0.21 (0.35)	12.81	0.39 ± 0.34 (0.48)	*(9.64)	0.19
0000-TR-120703-01-04	0.81 ± 0.13 (0.20)	1.21 ± 0.17 (0.37)	0.00	*(0.56)	*(10.36)	0.11
0000-TR-120703-02-01	0.95 ± 0.13 (0.22)	1.05 ± 0.20 (0.27)	13.61	0.42 ± 0.30 (0.48)	*(9.82)	0.06
0000-TR-120703-02-02	0.80 ± 0.11 (0.22)	1.00 ± 0.21 (0.33)	15.83	0.49 ± 0.23 (0.36)	*(9.71)	0.01
0000-TR-120703-02-03	0.88 ± 0.13 (0.23)	1.00 ± 0.21 (0.28)	*0.00	*(0.50)	*(9.86)	0.00
0000-TR-120703-02-04	0.91 ± 0.11 (0.21)	0.00 ± 0.00 (0.49)	8.86	0.27 ± 0.25 (0.42)	*(10.37)	0.01
0000-TR-120704-01-01	1.04 ± 0.15 (0.23)	1.19 ± 0.19 (0.33)	16.71	0.51 ± 0.34 (0.46)	*(10.59)	0.18
0000-TR-120704-02-01	0.93 ± 0.12 (0.20)	0.96 ± 0.20 (0.30)	*0.00	*(0.52)	*(10.13)	0.02
0000-TR-120704-02-02	1.08 ± 0.13 (0.24)	0.99 ± 0.19 (0.27)	7.10	0.22 ± 0.25 (0.42)	*(10.34)	0.10
0000-TR-120704-02-03	1.03 ± 0.12 (0.20)	0.96 ± 0.21 (0.33)	*0.00	*(0.34)	*(10.67)	0.07
0000-TR-120704-02-04	0.87 ± 0.13 (0.22)	0.00 ± 0.00 (0.49)	*0.00	*(0.50)	*(9.97)	0.00
0000-TR-120704-02-05	0.88 ± 0.12 (0.19)	0.97 ± 0.20 (0.29)	13.05	0.40 ± 0.19 (0.29)	*(10.03)	0.01
0000-TR-120704-02-06	0.76 ± 0.11 (0.17)	0.78 ± 0.21 (0.35)	19.95	0.61 ± 0.28 (0.45)	*(10.39)	0.01
0000-TR-120704-02-07	0.79 ± 0.12 (0.20)	1.00 ± 0.20 (0.29)	10.17	0.55 ± 0.29 (0.47)	3.69 ± 3.42 (5.47)	0.03
0000-TR-120704-02-08	0.71 ± 0.11 (0.19)	0.90 ± 0.18 (0.29)	18.34	0.56 ± 0.23 (0.36)	*(10.49)	0.01

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120709-02-01	0.96 ± 0.13 (0.25)	0.00 ± 0.00 (0.49)	*0.00	*(0.51)	*(9.84)	0.03
0000-TR-120709-02-02	0.84 ± 0.12 (0.23)	0.00 ± 0.00 (0.45)	*0.00	*(0.43)	*(10.30)	0.00
0000-TR-120709-02-03	0.90 ± 0.12 (0.19)	0.86 ± 0.17 (0.33)	10.22	0.31 ± 0.25 (0.41)	*(10.05)	0.01
0000-TR-120709-02-04	0.99 ± 0.14 (0.26)	0.84 ± 0.21 (0.34)	*0.00	*(0.51)	*(10.44)	0.05
0000-TR-120709-02-05	0.90 ± 0.12 (0.17)	0.00 ± 0.00 (0.46)	7.44	0.23 ± 0.24 (0.40)	*(9.93)	0.01
0000-TR-120709-02-06	0.85 ± 0.12 (0.26)	0.00 ± 0.00 (0.49)	9.40	0.29 ± 0.27 (0.45)	*(10.72)	0.01
0000-TR-120709-02-07	0.93 ± 0.12 (0.24)	0.88 ± 0.21 (0.34)	*0.00	*(0.43)	*(10.97)	0.02
0000-TR-120709-02-08	0.88 ± 0.12 (0.27)	0.93 ± 0.18 (0.32)	17.88	0.55 ± 0.29 (0.47)	*(10.42)	0.01
0000-TR-120709-02-09	0.87 ± 0.14 (0.24)	1.05 ± 0.22 (0.32)	0.00	*(0.35)	*(10.71)	0.03
0000-TR-120709-02-10	0.92 ± 0.14 (0.26)	1.02 ± 0.21 (0.29)	12.17	0.37 ± 0.25 (0.40)	*(10.97)	0.03
0000-TR-120709-02-11	0.88 ± 0.11 (0.20)	1.03 ± 0.21 (0.29)	11.04	0.34 ± 0.26 (0.43)	*(10.34)	0.02
0000-TR-120710-01-01	1.11 ± 0.17 (0.25)	1.04 ± 0.21 (0.34)	14.15	0.44 ± 0.34 (0.48)	*(10.90)	0.14
0000-TR-120710-01-02	1.09 ± 0.15 (0.19)	1.02 ± 0.15 (0.35)	9.99	0.31 ± 0.26 (0.37)	*(10.62)	0.11
0000-TR-120710-01-03	1.14 ± 0.15 (0.22)	1.15 ± 0.21 (0.34)	9.96	0.31 ± 0.31 (0.46)	*(9.95)	0.20
0000-TR-120710-01-04	1.08 ± 0.15 (0.22)	0.00 ± 0.00 (0.48)	13.01	0.40 ± 0.33 (0.47)	*(10.25)	0.10
0000-TR-120710-01-05	0.93 ± 0.14 (0.24)	1.15 ± 0.15 (0.34)	27.19	0.84 ± 0.46 (0.54)	*(10.36)	0.11
0000-TR-120710-01-06	0.79 ± 0.13 (0.23)	0.94 ± 0.18 (0.34)	23.86	0.73 ± 0.39 (0.45)	*(10.02)	0.01
0000-TR-120710-02-01	0.98 ± 0.12 (0.24)	0.00 ± 0.00 (0.46)	16.50	0.51 ± 0.30 (0.49)	*(10.21)	0.05
0000-TR-120710-02-02	0.85 ± 0.11 (0.19)	0.00 ± 0.00 (0.47)	12.71	0.39 ± 0.25 (0.40)	*(9.83)	0.01
0000-TR-120716-01-01	0.62 ± 0.13 (0.22)	1.11 ± 0.18 (0.32)	*0.00	*(0.55)	*(9.58)	0.06
0000-TR-120716-02-01	1.09 ± 0.12 (0.16)	0.96 ± 0.23 (0.31)	19.19	0.59 ± 0.28 (0.44)	*(10.15)	0.11
0000-TR-120716-02-02	0.93 ± 0.12 (0.22)	0.79 ± 0.18 (0.29)	23.54	0.72 ± 0.31 (0.49)	*(10.36)	0.03
0000-TR-120716-02-03	0.86 ± 0.11 (0.23)	0.93 ± 0.22 (0.29)	17.83	0.55 ± 0.22 (0.35)	*(10.15)	0.01
0000-TR-120716-02-04	0.81 ± 0.13 (0.22)	0.00 ± 0.00 (0.48)	20.64	0.64 ± 0.30 (0.49)	*(10.40)	0.01
0000-TR-120716-02-05	0.81 ± 0.11 (0.13)	1.03 ± 0.21 (0.29)	13.60	0.42 ± 0.27 (0.44)	*(9.84)	0.03
0000-TR-120716-02-06	0.69 ± 0.11 (0.19)	0.87 ± 0.21 (0.36)	11.41	0.35 ± 0.23 (0.38)	*(10.17)	0.01
0000-TR-120716-02-07	0.83 ± 0.12 (0.20)	0.87 ± 0.20 (0.29)	10.94	0.34 ± 0.22 (0.36)	*(10.56)	0.01
0000-TR-120716-02-08	0.94 ± 0.13 (0.21)	1.09 ± 0.21 (0.28)	6.70	0.21 ± 0.23 (0.38)	*(9.68)	0.07

Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2

Sample Reuse Stockpile 1	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL = 168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120716-02-09	0.79 ± 0.12 (0.21)	1.05 ± 0.19 (0.28)	*0.00	*(0.49)	*(10.25)	0.02
0000-TR-120716-02-10	0.80 ± 0.12 (0.22)	0.88 ± 0.17 (0.31)	*0.00	*(0.50)	*(10.26)	0.00
0000-TR-120723-01-01	0.98 ± 0.15 (0.25)	0.92 ± 0.18 (0.30)	12.79	0.39 ± 0.28 (0.38)	*(10.69)	0.05
0000-TR-120723-01-02	0.97 ± 0.14 (0.16)	0.88 ± 0.18 (0.31)	9.76	0.30 ± 0.30 (0.44)	*(10.31)	0.04
0000-TR-120723-01-03	0.96 ± 0.15 (0.25)	1.14 ± 0.19 (0.29)	14.12	0.43 ± 0.28 (0.36)	*(10.11)	0.11
0000-TR-120723-01-04	0.90 ± 0.14 (0.25)	1.01 ± 0.18 (0.30)	11.87	0.37 ± 0.29 (0.42)	*(10.16)	0.01
0000-TR-120723-01-05	0.68 ± 0.14 (0.23)	0.86 ± 0.19 (0.36)	12.11	0.37 ± 0.29 (0.42)	*(10.08)	0.01
0000-TR-120723-01-06	0.80 ± 0.13 (0.23)	1.24 ± 0.21 (0.33)	17.78	0.55 ± 0.34 (0.43)	*(11.06)	0.13
0000-TR-120730-01-01	1.05 ± 0.21 (0.21)	1.23 ± 0.20 (0.33)	10.42	0.32 ± 0.34 (0.52)	*(11.39)	0.20
0000-TR-120730-01-02	1.07 ± 0.15 (0.23)	1.20 ± 0.21 (0.36)	9.10	0.28 ± 0.31 (0.48)	*(10.84)	0.19
0000-TR-120730-01-03	0.95 ± 0.14 (0.22)	0.00 ± 0.00 (0.50)	12.43	0.38 ± 0.34 (0.50)	*(10.24)	0.03
0000-TR-120730-01-04	0.88 ± 0.14 (0.25)	0.96 ± 0.18 (0.32)	13.12	0.40 ± 0.31 (0.43)	*(10.57)	0.01
0000-TR-120730-01-05	0.90 ± 0.15 (0.26)	1.23 ± 0.22 (0.32)	*0.00	*(0.57)	*(10.35)	0.12
0000-TR-120730-02-01	0.95 ± 0.12 (0.24)	0.00 ± 0.00 (0.50)	*0.00	*(0.35)	*(10.62)	0.02
0000-TR-120730-02-02	0.91 ± 0.11 (0.21)	1.06 ± 0.19 (0.37)	*0.00	*(0.50)	*(10.13)	0.04
0000-TR-120730-02-03	0.94 ± 0.12 (0.21)	0.86 ± 0.17 (0.33)	8.59	0.26 ± 0.21 (0.34)	*(10.52)	0.03
0000-TR-120730-02-04	0.80 ± 0.11 (0.24)	0.95 ± 0.22 (0.36)	10.86	0.33 ± 0.26 (0.42)	*(10.53)	0.01
0000-TR-120730-02-05	0.89 ± 0.12 (0.14)	0.73 ± 0.20 (0.36)	*0.00	*(0.51)	*(9.78)	0.00
0000-TR-120730-02-06	1.04 ± 0.13 (0.22)	0.91 ± 0.19 (0.29)	14.21	0.44 ± 0.23 (0.37)	*(10.83)	0.08
0000-TR-120730-02-07	0.91 ± 0.11 (0.20)	1.07 ± 0.22 (0.33)	10.37	0.32 ± 0.28 (0.47)	*(9.26)	0.05
0000-TR-120730-02-08	0.89 ± 0.11 (0.21)	0.89 ± 0.21 (0.32)	13.40	0.41 ± 0.28 (0.47)	*(10.76)	0.01
0000-TR-120730-02-09	0.95 ± 0.13 (0.21)	0.97 ± 0.21 (0.30)	*0.00	*(0.52)	*(10.08)	0.03
0000-TR-120730-02-10	0.74 ± 0.11 (0.22)	0.88 ± 0.20 (0.29)	12.54	0.39 ± 0.25 (0.41)	*(9.79)	0.01

* (asterisk): Indicates measurement < HRGS Decision Level

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Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2

Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120320-01-01	0.65 ± 0.09 (0.15)	0.76 ± 0.17 (0.28)	24.21	0.74 ± 0.29 (0.45)	*(8.24)	0.01
0000-TR-120320-01-02	0.63 ± 0.09 (0.17)	0.77 ± 0.15 (0.29)	25.96	0.80 ± 0.28 (0.44)	*(9.13)	0.02
0000-TR-120320-01-03	0.54 ± 0.09 (0.19)	0.68 ± 0.16 (0.24)	17.96	0.55 ± 0.23 (0.35)	*(8.06)	0.01
0000-TR-120320-02-01	0.59 ± 0.10 (0.19)	0.54 ± 0.13 (0.23)	16.53	0.51 ± 0.22 (0.34)	*(9.30)	0.01
0000-TR-120320-02-02	0.55 ± 0.09 (0.19)	0.00 ± 0.00 (0.42)	*0.00	*(0.47)	*(8.83)	0.00
0000-TR-120321-01-01	0.72 ± 0.10 (0.17)	0.65 ± 0.15 (0.24)	11.03	0.34 ± 0.20 (0.31)	*(8.60)	0.01
0000-TR-120321-01-02	0.71 ± 0.09 (0.18)	0.00 ± 0.00 (0.39)	11.75	0.64 ± 0.27 (0.42)	3.69 ± 3.23 (5.12)	0.03
0000-TR-120321-01-03	0.49 ± 0.09 (0.17)	0.71 ± 0.16 (0.24)	19.50	0.60 ± 0.19 (0.29)	*(8.08)	0.01
0000-TR-120321-01-04	0.62 ± 0.11 (0.17)	0.72 ± 0.16 (0.25)	21.94	0.68 ± 0.28 (0.44)	*(8.94)	0.01
0000-TR-120321-01-05	0.78 ± 0.13 (0.25)	0.89 ± 0.17 (0.31)	23.49	0.72 ± 0.27 (0.41)	*(9.89)	0.01
0000-TR-120321-01-06	0.68 ± 0.09 (0.17)	0.76 ± 0.17 (0.30)	16.64	0.51 ± 0.26 (0.42)	*(8.98)	0.01
0000-TR-120321-02-01	0.53 ± 0.09 (0.18)	0.00 ± 0.00 (0.40)	9.59	0.29 ± 0.17 (0.28)	*(8.98)	0.01
0000-TR-120321-02-02	0.46 ± 0.09 (0.18)	0.00 ± 0.00 (0.42)	10.68	0.33 ± 0.23 (0.38)	*(8.80)	0.01
0000-TR-120321-02-03	0.61 ± 0.10 (0.16)	0.00 ± 0.00 (0.35)	18.73	0.58 ± 0.22 (0.34)	*(8.55)	0.01
0000-TR-120321-02-04	0.59 ± 0.10 (0.14)	0.00 ± 0.00 (0.41)	9.83	0.30 ± 0.18 (0.29)	*(9.27)	0.01
0000-TR-120321-02-05	0.54 ± 0.09 (0.17)	0.85 ± 0.18 (0.28)	17.63	0.54 ± 0.45 (0.35)	*(9.66)	0.01
0000-TR-120321-02-06	0.61 ± 0.10 (0.23)	0.00 ± 0.00 (0.46)	18.03	0.55 ± 0.25 (0.40)	*(10.03)	0.01
0000-TR-120326-01-01	0.94 ± 0.10 (0.18)	0.81 ± 0.17 (0.23)	13.89	0.43 ± 0.24 (0.38)	*(9.15)	0.03
0000-TR-120326-01-02	0.84 ± 0.10 (0.19)	0.71 ± 0.17 (0.28)	22.20	0.68 ± 0.26 (0.41)	*(8.58)	0.01
0000-TR-120326-01-03	0.70 ± 0.10 (0.19)	0.82 ± 0.18 (0.25)	16.74	0.52 ± 0.26 (0.42)	*(9.23)	0.01
0000-TR-120326-01-04	0.79 ± 0.11 (0.17)	0.89 ± 0.18 (0.28)	*0.00	*(0.52)	*(9.34)	0.00
0000-TR-120326-01-05	0.76 ± 0.10 (0.15)	0.98 ± 0.20 (0.34)	*0.00	*(0.54)	*(10.25)	0.00
0000-TR-120326-01-06	0.79 ± 0.11 (0.17)	0.89 ± 0.18 (0.26)	*0.00	*(0.50)	*(9.25)	0.00
0000-TR-120326-01-07	0.80 ± 0.12 (0.20)	0.74 ± 0.17 (0.29)	*0.00	*(0.53)	*(9.68)	0.00
0000-TR-120326-02-01	0.92 ± 0.11 (0.17)	0.71 ± 0.17 (0.26)	7.66	0.24 ± 0.19 (0.31)	*(9.34)	0.02
0000-TR-120326-02-02	0.84 ± 0.10 (0.19)	0.69 ± 0.15 (0.23)	13.12	0.40 ± 0.23 (0.37)	*(8.83)	0.01
0000-TR-120326-02-03	0.87 ± 0.12 (0.18)	0.00 ± 0.00 (0.45)	8.17	0.44 ± 0.23 (0.37)	3.97 ± 3.74 (6.01)	0.03
0000-TR-120326-02-04	0.74 ± 0.13 (0.24)	0.88 ± 0.19 (0.29)	*0.00	*(0.38)	*(9.91)	0.00

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120326-02-05	0.76 ± 0.10 (0.17)	0.00 ± 0.00 (0.47)	6.18	0.19 ± 0.19 (0.31)	*(9.95)	0.00
0000-TR-120326-02-06	0.71 ± 0.10 (0.23)	0.73 ± 0.15 (0.28)	6.96	0.21 ± 0.19 (0.32)	*(9.60)	0.00
0000-TR-120326-02-07	0.73 ± 0.11 (0.20)	0.72 ± 0.18 (0.28)	6.02	0.19 ± 0.17 (0.29)	*(9.65)	0.00
0000-TR-120326-02-08	0.52 ± 0.12 (0.21)	0.00 ± 0.00 (0.38)	*0.00	*(0.30)	*(9.27)	0.00
0000-TR-120327-01-01	0.73 ± 0.10 (0.18)	0.76 ± 0.14 (0.26)	11.83	0.36 ± 0.21 (0.33)	- *(9.44)	0.01
0000-TR-120327-01-02	0.59 ± 0.09 (0.18)	0.00 ± 0.00 (0.40)	7.83	0.24 ± 0.17 (0.27)	*(8.54)	0.00
0000-TR-120327-01-03	0.75 ± 0.11 (0.23)	1.09 ± 0.19 (0.24)	7.99	0.25 ± 0.26 (0.44)	*(9.93)	0.05
0000-TR-120327-01-04	0.79 ± 0.11 (0.20)	0.98 ± 0.19 (0.30)	21.03	0.65 ± 0.29 (0.46)	*(10.18)	0.01
0000-TR-120327-01-05	0.52 ± 0.09 (0.15)	0.00 ± 0.00 (0.37)	15.19	0.47 ± 0.22 (0.35)	*(7.67)	0.01
0000-TR-120327-01-06	0.83 ± 0.11 (0.19)	0.94 ± 0.18 (0.33)	10.59	0.33 ± 0.27 (0.45)	*(10.33)	0.01
0000-TR-120327-01-07	0.69 ± 0.11 (0.17)	0.85 ± 0.17 (0.23)	*0.00	*(0.49)	*(8.86)	0.00
0000-TR-120327-02-01	0.63 ± 0.09 (0.18)	0.61 ± 0.16 (0.29)	18.93	0.58 ± 0.27 (0.43)	*(8.43)	0.01
0000-TR-120327-02-02	0.58 ± 0.09 (0.17)	0.67 ± 0.17 (0.29)	5.83	0.18 ± 0.18 (0.29)	*(9.08)	0.00
0000-TR-120327-02-03	0.74 ± 0.11 (0.17)	0.00 ± 0.00 (0.49)	*0.00	*(0.54)	*(10.83)	0.00
0000-TR-120327-02-04	0.64 ± 0.11 (0.23)	0.76 ± 0.17 (0.26)	8.72	0.27 ± 0.22 (0.36)	*(10.20)	0.01
0000-TR-120327-02-05	0.54 ± 0.09 (0.18)	0.00 ± 0.00 (0.37)	5.85	0.18 ± 0.19 (0.31)	*(8.26)	0.00
0000-TR-120327-02-06	0.56 ± 0.09 (0.22)	0.84 ± 0.19 (0.29)	13.98	0.43 ± 0.26 (0.42)	*(10.46)	0.01
0000-TR-120327-02-07	0.67 ± 0.10 (0.18)	0.84 ± 0.17 (0.23)	13.71	0.42 ± 0.24 (0.39)	*(10.30)	0.01
0000-TR-120328-01-01	0.80 ± 0.10 (0.16)	0.66 ± 0.15 (0.24)	7.29	0.22 ± 0.21 (0.34)	*(8.39)	0.00
0000-TR-120328-01-02	0.62 ± 0.09 (0.20)	0.76 ± 0.16 (0.23)	0.00	*(0.48)	*(8.62)	0.00
0000-TR-120328-01-03	0.74 ± 0.11 (0.21)	0.88 ± 0.18 (0.29)	11.24	0.35 ± 0.25 (0.41)	*(9.79)	0.01
0000-TR-120328-01-04	0.79 ± 0.12 (0.18)	0.91 ± 0.17 (0.32)	*0.00	*(0.52)	*(9.43)	0.00
0000-TR-120328-01-05	0.75 ± 0.11 (0.20)	1.03 ± 0.20 (0.29)	9.92	0.31 ± 0.29 (0.47)	*(10.33)	0.02
0000-TR-120328-01-06	0.70 ± 0.12 (0.22)	0.50 ± 0.15 (0.25)	16.01	0.49 ± 0.21 (0.34)	*(8.78)	0.01
0000-TR-120328-01-07	0.58 ± 0.09 (0.22)	0.62 ± 0.18 (0.32)	19.58	0.60 ± 0.23 (0.36)	*(9.40)	0.01
0000-TR-120328-02-01	0.68 ± 0.09 (0.17)	0.60 ± 0.14 (0.22)	8.42	0.26 ± 0.21 (0.35)	*(7.96)	0.01
0000-TR-120328-02-02	0.79 ± 0.13 (0.23)	0.81 ± 0.16 (0.32)	*0.00	*(0.52)	*(10.08)	0.00
0000-TR-120328-02-03	0.75 ± 0.40 (0.18)	0.83 ± 0.42 (0.29)	*0.00	*(0.33)	*(9.61)	0.00

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>					
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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120328-02-04	0.48 ± 0.08 (0.17)	0.00 ± 0.00 (0.39)	10.40	0.32 ± 0.21 (0.34)	*(9.11)	0.01
0000-TR-120328-02-05	0.67 ± 0.09 (0.18)	0.87 ± 0.18 (0.28)	8.83	0.27 ± 0.28 (0.47)	*(9.85)	0.01
0000-TR-120328-02-06	0.49 ± 0.08 (0.18)	0.60 ± 0.16 (0.28)	18.01	0.55 ± 0.26 (0.42)	*(8.50)	0.01
0000-TR-120328-02-07	0.58 ± 0.09 (0.19)	0.34 ± 0.15 (0.29)	13.51	0.42 ± 0.21 (0.34)	*(8.86)	0.01
0000-TR-120329-01-03	0.77 ± 0.13 (0.25)	0.00 ± 0.00 (0.51)	11.83	0.36 ± 0.31 (0.51)	*(10.82)	0.01
0000-TR-120329-01-04	0.79 ± 0.11 (0.21)	0.98 ± 0.20 (0.28)	*0.00	*(0.40)	*(9.96)	0.00
0000-TR-120329-01-05	0.84 ± 0.11 (0.19)	0.99 ± 0.16 (0.29)	22.31	0.69 ± 0.27 (0.42)	*(9.89)	0.01
0000-TR-120329-01-06	0.80 ± 0.10 (0.19)	0.88 ± 0.18 (0.28)	24.14	0.74 ± 0.28 (0.43)	*(8.90)	0.01
0000-TR-120329-01-07	0.84 ± 0.11 (0.20)	0.00 ± 0.00 (0.49)	*0.00	*(0.55)	*(9.65)	0.00
0000-TR-120329-02-03	0.77 ± 0.13 (0.25)	0.00 ± 0.00 (0.48)	*0.00	*(0.53)	*(10.04)	0.00
0000-TR-120329-02-04	0.76 ± 0.11 (0.22)	0.90 ± 0.20 (0.34)	10.49	0.32 ± 0.23 (0.37)	*(9.91)	0.01
0000-TR-120329-02-05	0.77 ± 0.10 (0.20)	0.82 ± 0.18 (0.24)	19.42	0.60 ± 0.23 (0.36)	*(10.07)	0.01
0000-TR-120329-02-06	0.74 ± 0.10 (0.19)	0.81 ± 0.17 (0.24)	8.14	0.25 ± 0.23 (0.38)	*(9.69)	0.00
0000-TR-120329-02-07	0.72 ± 0.10 (0.19)	0.00 ± 0.00 (0.42)	14.30	0.44 ± 0.21 (0.34)	*(9.18)	0.01
0000-TR-120402-01-01	0.95 ± 0.11 (0.19)	0.82 ± 0.18 (0.28)	23.86	0.73 ± 0.27 (0.43)	*(9.59)	0.04
0000-TR-120402-01-02	0.84 ± 0.10 (0.21)	0.79 ± 0.17 (0.23)	16.80	0.52 ± 0.22 (0.34)	*(8.76)	0.01
0000-TR-120402-01-03	0.90 ± 0.10 (0.19)	0.00 ± 0.00 (0.40)	25.00	0.77 ± 0.24 (0.36)	*(9.00)	0.01
0000-TR-120402-01-04	0.74 ± 0.10 (0.20)	0.92 ± 0.19 (0.29)	19.18	0.59 ± 0.25 (0.40)	*(9.55)	0.01
0000-TR-120402-01-05	0.68 ± 0.09 (0.18)	0.99 ± 0.16 (0.24)	17.10	0.53 ± 0.27 (0.43)	*(8.57)	0.01
0000-TR-120402-01-06	0.70 ± 0.10 (0.20)	0.73 ± 0.18 (0.28)	25.80	0.79 ± 0.31 (0.48)	*(9.09)	0.02
0000-TR-120402-01-07	0.63 ± 0.10 (0.17)	0.75 ± 0.17 (0.25)	8.37	0.26 ± 0.22 (0.37)	*(9.12)	0.00
0000-TR-120402-01-08	0.75 ± 0.10 (0.18)	0.71 ± 0.14 (0.25)	21.53	0.66 ± 0.29 (0.47)	*(9.65)	0.01
0000-TR-120402-02-01	1.17 ± 0.13 (0.25)	0.00 ± 0.00 (0.49)	10.79	0.33 ± 0.21 (0.35)	*(10.90)	0.15
0000-TR-120402-02-02	1.01 ± 0.15 (0.27)	0.88 ± 0.21 (0.35)	*0.00	*(0.57)	*(10.81)	0.06
0000-TR-120402-02-03	0.86 ± 0.11 (0.20)	0.77 ± 0.16 (0.29)	14.95	0.46 ± 0.25 (0.40)	*(9.77)	0.01
0000-TR-120402-02-04	0.69 ± 0.09 (0.17)	0.71 ± 0.16 (0.26)	12.42	0.38 ± 0.18 (0.29)	*(9.44)	0.01
0000-TR-120402-02-05	0.70 ± 0.10 (0.23)	0.85 ± 0.17 (0.28)	0.00	*(0.52)	*(10.19)	0.00
0000-TR-120402-02-06	0.64 ± 0.11 (0.24)	0.83 ± 0.16 (0.26)	9.04	0.28 ± 0.22 (0.37)	*(10.62)	0.01

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>					
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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120402-02-07	0.56 ± 0.10 (0.19)	0.55 ± 0.16 (0.28)	18.45	0.57 ± 0.24 (0.38)	*(9.61)	0.01
0000-TR-120402-02-08	0.78 ± 0.12 (0.24)	0.00 ± 0.00 (0.41)	19.20	0.59 ± 0.25 (0.39)	*(9.07)	0.01
0000-TR-120403-01-01	1.07 ± 0.13 (0.23)	1.09 ± 0.22 (0.30)	15.30	0.47 ± 0.31 (0.51)	*(11.17)	0.14
0000-TR-120403-01-02	0.90 ± 0.11 (0.20)	0.89 ± 0.19 (0.27)	9.03	0.28 ± 0.23 (0.37)	*(11.07)	0.01
0000-TR-120403-01-03	1.02 ± 0.12 (0.24)	0.95 ± 0.21 (0.32)	7.17	0.22 ± 0.24 (0.39)	*(10.12)	0.07
0000-TR-120403-01-04	0.70 ± 0.11 (0.18)	0.95 ± 0.18 (0.27)	*0.00	*(0.41)	*(9.43)	0.00
0000-TR-120403-01-05	0.73 ± 0.11 (0.20)	0.82 ± 0.17 (0.33)	15.72	0.48 ± 0.27 (0.43)	*(9.70)	0.01
0000-TR-120403-01-06	0.62 ± 0.09 (0.18)	0.91 ± 0.18 (0.28)	11.55	0.36 ± 0.24 (0.40)	*(9.43)	0.01
0000-TR-120403-01-07	0.72 ± 0.10 (0.17)	0.87 ± 0.18 (0.25)	9.98	0.31 ± 0.21 (0.35)	*(9.59)	0.01
0000-TR-120403-01-08	0.60 ± 0.12 (0.17)	0.93 ± 0.17 (0.27)	13.47	0.41 ± 0.20 (0.32)	*(9.38)	0.01
0000-TR-120403-02-01	1.03 ± 0.13 (0.24)	0.00 ± 0.00 (0.52)	*0.00	*(0.56)	*(11.34)	0.07
0000-TR-120403-02-02	0.88 ± 0.11 (0.23)	0.82 ± 0.19 (0.33)	*0.00	*(0.53)	*(10.08)	0.00
0000-TR-120403-02-03	0.77 ± 0.11 (0.17)	0.00 ± 0.00 (0.43)	11.38	0.35 ± 0.26 (0.43)	*(9.43)	0.01
0000-TR-120403-02-04	0.73 ± 0.12 (0.21)	0.00 ± 0.00 (0.47)	*0.00	*(0.34)	*(10.74)	0.00
0000-TR-120403-02-05	0.64 ± 0.09 (0.18)	0.67 ± 0.15 (0.30)	*0.00	*(0.39)	*(9.75)	0.00
0000-TR-120403-02-06	0.71 ± 0.10 (0.19)	0.91 ± 0.19 (0.28)	8.21	0.25 ± 0.21 (0.35)	*(9.64)	0.00
0000-TR-120403-02-07	0.72 ± 0.11 (0.21)	0.66 ± 0.17 (0.28)	11.46	0.35 ± 0.24 (0.39)	*(10.30)	0.01
0000-TR-120403-02-08	0.60 ± 0.09 (0.18)	0.76 ± 0.17 (0.27)	11.56	0.36 ± 0.23 (0.38)	*(10.10)	0.01
0000-TR-120404-01-01	0.90 ± 0.11 (0.21)	0.95 ± 0.17 (0.26)	*0.00	*(0.51)	*(10.03)	0.00
0000-TR-120404-01-02	0.97 ± 0.11 (0.02)	0.99 ± 0.20 (0.27)	*0.00	*(0.37)	*(9.46)	0.04
0000-TR-120404-01-03	0.94 ± 0.12 (0.19)	1.03 ± 0.19 (0.30)	*0.00	*(0.55)	*(9.98)	0.04
0000-TR-120404-01-04	0.77 ± 0.11 (0.20)	1.04 ± 0.20 (0.30)	*0.00	*(0.48)	*(9.60)	0.02
0000-TR-120404-01-05	0.81 ± 0.10 (0.16)	0.92 ± 0.16 (0.27)	27.19	0.84 ± 0.27 (0.41)	*(9.15)	0.02
0000-TR-120404-01-06	0.80 ± 0.10 (0.18)	1.01 ± 0.19 (0.27)	20.93	0.64 ± 0.29 (0.47)	*(9.57)	0.02
0000-TR-120404-01-07	0.83 ± 0.10 (0.16)	1.07 ± 0.20 (0.27)	26.53	0.82 ± 0.26 (0.39)	*(9.36)	0.05
0000-TR-120404-01-08	0.81 ± 0.13 (0.23)	0.00 ± 0.00 (0.43)	55.31	1.70 ± 0.32 (0.45)	*(9.36)	0.03
0000-TR-120404-01-09	0.81 ± 0.11 (0.17)	0.79 ± 0.16 (0.34)	15.33	0.47 ± 0.32 (0.52)	*(9.79)	0.01
0000-TR-120404-02-01	0.91 ± 0.12 (0.26)	0.92 ± 0.20 (0.31)	*0.00	*(0.50)	*(10.18)	0.01

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Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2

Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120404-02-02	0.92 ± 0.11 (0.22)	0.88 ± 0.16 (0.26)	*0.00	*(0.50)	*(9.55)	0.01
0000-TR-120404-02-03	0.95 ± 0.11 (0.02)	0.77 ± 0.19 (0.33)	*0.00	*(0.44)	*(9.95)	0.03
0000-TR-120404-02-04	0.81 ± 0.10 (0.22)	0.80 ± 0.15 (0.30)	14.52	0.45 ± 0.25 (0.41)	*(10.10)	0.01
0000-TR-120404-02-05	0.84 ± 0.11 (0.11)	0.84 ± 0.20 (0.29)	19.77	0.61 ± 0.26 (0.42)	*(9.48)	0.01
0000-TR-120404-02-06	0.82 ± 0.11 (0.21)	1.01 ± 0.20 (0.27)	13.38	0.41 ± 0.31 (0.51)	*(9.72)	0.01
0000-TR-120404-02-07	0.72 ± 0.11 (0.24)	0.00 ± 0.00 (0.41)	12.86	0.40 ± 0.26 (0.42)	*(9.15)	0.01
0000-TR-120404-02-08	0.72 ± 0.09 (0.17)	0.00 ± 0.00 (0.44)	25.74	0.79 ± 0.29 (0.46)	*(9.75)	0.02
0000-TR-120409-01-01	0.90 ± 0.11 (0.19)	0.86 ± 0.17 (0.24)	13.14	0.40 ± 0.22 (0.36)	*(9.14)	0.01
0000-TR-120409-01-02	0.83 ± 0.11 (0.20)	0.84 ± 0.17 (0.25)	17.29	0.53 ± 0.27 (0.43)	*(8.96)	0.01
0000-TR-120409-02-01	0.69 ± 0.10 (0.19)	0.00 ± 0.00 (0.42)	12.96	0.40 ± 0.25 (0.41)	*(9.20)	0.01
0000-TR-120409-02-02	0.83 ± 0.12 (0.22)	0.00 ± 0.00 (0.41)	16.23	0.50 ± 0.23 (0.37)	*(8.95)	0.01
0000-TR-120410-01-01	0.74 ± 0.11 (0.22)	0.90 ± 0.16 (0.27)	13.39	0.41 ± 0.25 (0.40)	*(8.92)	0.01
0000-TR-120410-01-02	0.73 ± 0.11 (0.21)	1.04 ± 0.18 (0.28)	18.62	0.57 ± 0.31 (0.50)	*(9.30)	0.03
0000-TR-120410-01-03	0.51 ± 0.08 (0.16)	0.59 ± 0.15 (0.23)	31.37	0.97 ± 0.27 (0.41)	*(7.69)	0.02
0000-TR-120410-01-04	0.54 ± 0.10 (0.14)	0.00 ± 0.00 (0.35)	28.89	0.89 ± 0.23 (0.35)	*(7.73)	0.02
0000-TR-120410-01-05	0.93 ± 0.11 (0.21)	0.93 ± 0.15 (0.29)	7.17	0.39 ± 0.24 (0.40)	3.20 ± 3.54 (5.82)	0.04
0000-TR-120410-01-06	0.81 ± 0.11 (0.21)	1.12 ± 0.18 (0.25)	*0.00	*(0.53)	*(9.96)	0.06
0000-TR-120410-01-07	0.76 ± 0.10 (0.20)	0.84 ± 0.19 (0.31)	12.86	0.40 ± 0.26 (0.43)	*(9.46)	0.01
0000-TR-120410-01-08	0.80 ± 0.11 (0.23)	0.89 ± 0.16 (0.31)	23.28	0.72 ± 0.30 (0.47)	*(9.40)	0.01
0000-TR-120410-02-01	0.77 ± 0.11 (0.20)	0.65 ± 0.16 (0.27)	18.63	0.57 ± 0.25 (0.40)	*(9.42)	0.01
0000-TR-120410-02-02	0.73 ± 0.10 (0.19)	0.98 ± 0.20 (0.28)	14.85	0.46 ± 0.27 (0.44)	*(10.24)	0.01
0000-TR-120410-02-03	0.82 ± 0.12 (0.23)	0.00 ± 0.00 (0.52)	11.41	0.35 ± 0.27 (0.45)	*(13.61)	0.01
0000-TR-120410-02-04	0.76 ± 0.11 (0.21)	0.69 ± 0.14 (0.22)	*0.00	*(0.48)	*(9.96)	0.00
0000-TR-120410-02-05	0.63 ± 0.09 (0.18)	0.75 ± 0.18 (0.30)	8.21	0.25 ± 0.18 (0.29)	*(9.26)	0.00
0000-TR-120410-02-06	0.78 ± 0.11 (0.20)	0.86 ± 0.19 (0.31)	*0.00	*(0.50)	*(9.69)	0.00
0000-TR-120410-02-07	0.75 ± 0.10 (0.19)	0.71 ± 0.18 (0.30)	14.74	0.45 ± 0.23 (0.37)	*(9.04)	0.01
0000-TR-120410-02-08	0.74 ± 0.10 (0.19)	0.88 ± 0.16 (0.29)	*0.00	*(0.35)	*(8.95)	0.00
0000-TR-120410-02-09	0.75 ± 0.11 (0.21)	0.69 ± 0.18 (0.31)	6.24	0.19 ± 0.19 (0.31)	*(9.43)	0.00

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<div>Attachment 3</div> <div>Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2</div>						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120411-01-01	0.73 ± 0.09 (0.15)	0.00 ± 0.00 (0.35)	23.74	0.73 ± 0.23 (0.36)	*(8.03)	0.01
0000-TR-120411-01-02	0.68 ± 0.09 (0.11)	0.58 ± 0.14 (0.25)	20.57	0.63 ± 0.23 (0.36)	*(8.16)	0.01
0000-TR-120411-01-03	0.60 ± 0.09 (0.16)	0.55 ± 0.14 (0.20)	22.98	0.71 ± 0.26 (0.40)	*(8.74)	0.01
0000-TR-120411-01-04	0.59 ± 0.10 (0.12)	0.00 ± 0.00 (0.40)	16.13	0.50 ± 0.22 (0.34)	*(8.54)	0.01
0000-TR-120411-01-05	0.48 ± 0.08 (0.15)	0.00 ± 0.00 (0.40)	16.06	0.49 ± 0.23 (0.37)	*(8.31)	0.01
0000-TR-120411-01-06	0.51 ± 0.09 (0.18)	0.00 ± 0.00 (0.38)	16.24	0.50 ± 0.26 (0.43)	*(8.19)	0.01
0000-TR-120411-01-07	0.72 ± 0.10 (0.17)	0.99 ± 0.17 (0.29)	19.62	0.60 ± 0.28 (0.45)	*(8.91)	0.01
0000-TR-120411-02-01	0.77 ± 0.09 (0.18)	0.00 ± 0.00 (0.36)	21.24	0.65 ± 0.22 (0.33)	*(9.00)	0.01
0000-TR-120411-02-02	0.60 ± 0.09 (0.16)	0.51 ± 0.13 (0.27)	19.74	0.61 ± 0.23 (0.36)	*(8.65)	0.01
0000-TR-120411-02-03	0.58 ± 0.09 (0.17)	0.00 ± 0.00 (0.40)	18.97	0.58 ± 0.23 (0.36)	*(8.84)	0.01
0000-TR-120411-02-04	0.79 ± 0.11 (0.18)	0.75 ± 0.19 (0.33)	*0.00	*(0.50)	*(9.65)	0.00
0000-TR-120411-02-05	0.53 ± 0.09 (0.17)	0.60 ± 0.15 (0.23)	9.09	0.28 ± 0.22 (0.37)	*(8.41)	0.01
0000-TR-120411-02-06	0.74 ± 0.11 (0.17)	0.82 ± 0.18 (0.31)	6.26	0.19 ± 0.23 (0.38)	*(9.91)	0.00
0000-TR-120411-02-07	0.65 ± 0.10 (0.23)	0.76 ± 0.15 (0.29)	*0.00	*(0.49)	*(10.08)	0.00
0000-TR-120411-02-08	0.68 ± 0.10 (0.02)	0.81 ± 0.18 (0.29)	7.35	0.23 ± 0.18 (0.30)	*(10.13)	0.00
0000-TR-120417-01-01	0.84 ± 0.12 (0.20)	0.83 ± 0.19 (0.32)	18.43	0.57 ± 0.22 (0.34)	*(8.76)	0.01
0000-TR-120417-01-02	0.75 ± 0.10 (0.20)	0.84 ± 0.20 (0.34)	14.63	0.45 ± 0.28 (0.45)	*(9.26)	0.01
0000-TR-120417-01-03	0.78 ± 0.11 (0.21)	0.00 ± 0.00 (0.46)	*0.00	*(0.56)	*(10.38)	0.00
0000-TR-120417-01-04	0.71 ± 0.12 (0.22)	1.13 ± 0.17 (0.28)	15.29	0.47 ± 0.27 (0.44)	*(9.19)	0.07
0000-TR-120417-02-05	0.56 ± 0.11 (0.23)	0.00 ± 0.00 (0.44)	17.50	0.54 ± 0.24 (0.38)	*(10.59)	0.01
0000-TR-120417-02-06	0.82 ± 0.13 (0.21)	0.00 ± 0.00 (0.44)	*0.00	*(0.49)	*(10.01)	0.00
0000-TR-120417-02-07	0.70 ± 0.12 (0.22)	0.00 ± 0.00 (0.46)	15.69	0.48 ± 0.27 (0.44)	*(10.69)	0.01
0000-TR-120418-01-01	1.00 ± 0.12 (0.21)	0.87 ± 0.16 (0.30)	13.69	0.42 ± 0.29 (0.48)	*(9.42)	0.06
0000-TR-120418-01-02	0.92 ± 0.11 (0.18)	0.90 ± 0.16 (0.29)	8.96	0.28 ± 0.25 (0.42)	*(10.09)	0.01
0000-TR-120418-01-03	0.64 ± 0.09 (0.16)	0.70 ± 0.16 (0.25)	9.90	0.30 ± 0.17 (0.27)	*(7.97)	0.01
0000-TR-120418-01-04	0.46 ± 0.08 (0.17)	0.00 ± 0.00 (0.30)	19.20	0.59 ± 0.21 (0.32)	*(7.01)	0.01
0000-TR-120418-01-05	0.45 ± 0.07 (0.14)	0.00 ± 0.00 (0.34)	20.31	0.62 ± 0.25 (0.39)	*(7.79)	0.01
0000-TR-120418-01-06	0.53 ± 0.08 (0.18)	0.78 ± 0.18 (0.26)	12.31	0.38 ± 0.23 (0.37)	*(7.61)	0.01

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120418-01-07	0.68 ± 0.10 (0.20)	0.95 ± 0.19 (0.29)	12.79	0.39 ± 0.30 (0.50)	*(9.95)	0.01
0000-TR-120418-01-08	0.74 ± 0.10 (0.16)	0.99 ± 0.20 (0.31)	8.46	0.26 ± 0.24 (0.39)	*(9.50)	0.01
0000-TR-120418-01-09	0.82 ± 0.11 (0.19)	1.01 ± 0.19 (0.31)	*0.00	*(0.51)	*(10.23)	0.00
0000-TR-120418-02-01	0.96 ± 0.12 (0.23)	0.00 ± 0.00 (0.46)	*0.00	*(0.50)	*(10.25)	0.03
0000-TR-120418-02-02	0.83 ± 0.10 (0.18)	0.81 ± 0.18 (0.27)	*0.00	*(0.50)	*(9.81)	0.00
0000-TR-120418-02-03	0.53 ± 0.09 (0.16)	0.00 ± 0.00 (0.33)	20.97	0.65 ± 0.24 (0.38)	*(8.42)	0.01
0000-TR-120418-02-04	0.45 ± 0.10 (0.19)	0.00 ± 0.00 (0.33)	13.99	0.43 ± 0.18 (0.29)	*(7.37)	0.01
0000-TR-120418-02-05	0.49 ± 0.08 (0.17)	0.00 ± 0.00 (0.36)	8.47	0.46 ± 0.22 (0.36)	3.32 ± 2.76 (4.26)	0.03
0000-TR-120418-02-06	0.70 ± 0.10 (0.18)	0.86 ± 0.19 (0.28)	13.94	0.43 ± 0.26 (0.42)	*(9.80)	0.01
0000-TR-120418-02-07	0.63 ± 0.11 (0.19)	0.82 ± 0.19 (0.28)	13.86	0.43 ± 0.25 (0.41)	*(10.07)	0.01
0000-TR-120418-02-08	0.65 ± 0.10 (0.21)	0.85 ± 0.20 (0.30)	*0.00	*(0.50)	*(9.92)	0.00
0000-TR-120419-01-01	0.86 ± 0.11 (0.18)	1.05 ± 0.20 (0.27)	6.31	0.19 ± 0.19 (0.31)	*(9.29)	0.03
0000-TR-120419-01-02	0.95 ± 0.11 (0.20)	0.95 ± 0.19 (0.28)	*0.00	*(0.33)	*(10.19)	0.03
0000-TR-120419-01-03	0.78 ± 0.12 (0.23)	0.88 ± 0.19 (0.29)	*0.00	*(0.54)	*(10.04)	0.00
0000-TR-120419-01-04	0.71 ± 0.11 (0.23)	1.07 ± 0.21 (0.31)	11.58	0.36 ± 0.25 (0.41)	*(9.33)	0.04
0000-TR-120419-01-05	0.78 ± 0.11 (0.22)	0.90 ± 0.19 (0.31)	9.59	0.30 ± 0.22 (0.36)	*(9.84)	0.01
0000-TR-120419-01-06	0.70 ± 0.10 (0.24)	0.86 ± 0.18 (0.29)	*0.00	*(0.51)	*(9.17)	0.00
0000-TR-120419-01-07	0.70 ± 0.10 (0.22)	0.92 ± 0.18 (0.32)	*0.00	*(0.52)	*(9.05)	0.00
0000-TR-120419-01-08	0.77 ± 0.10 (0.19)	0.89 ± 0.19 (0.30)	7.29	0.22 ± 0.21 (0.35)	*(8.99)	0.00
0000-TR-120419-02-01	0.92 ± 0.12 (0.25)	0.00 ± 0.00 (0.48)	8.29	0.26 ± 0.20 (0.32)	*(10.59)	0.01
0000-TR-120419-02-02	0.83 ± 0.11 (0.19)	0.92 ± 0.18 (0.26)	*0.00	*(0.50)	*(10.11)	0.00
0000-TR-120419-02-03	0.77 ± 0.10 (0.20)	0.00 ± 0.00 (0.44)	*0.00	*(0.47)	*(10.13)	0.00
0000-TR-120419-02-04	0.66 ± 0.11 (0.24)	0.00 ± 0.00 (0.47)	10.88	0.33 ± 0.25 (0.40)	*(9.62)	0.01
0000-TR-120419-02-05	0.73 ± 0.11 (0.22)	0.00 ± 0.00 (0.46)	*0.00	*(0.49)	*(9.30)	0.00
0000-TR-120419-02-06	0.60 ± 0.10 (0.22)	0.70 ± 0.18 (0.31)	*0.00	*(0.40)	*(9.43)	0.00
0000-TR-120419-02-07	0.71 ± 0.10 (0.13)	0.79 ± 0.18 (0.31)	10.30	0.32 ± 0.25 (0.42)	*(9.73)	0.01
0000-TR-120419-02-08	0.72 ± 0.10 (0.22)	0.00 ± 0.00 (0.44)	22.33	0.69 ± 0.28 (0.45)	*(10.01)	0.01
0000-TR-120424-01-01	0.79 ± 0.10 (0.19)	0.94 ± 0.18 (0.27)	10.58	0.33 ± 0.27 (0.44)	*(8.92)	0.01

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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120424-01-02	0.85 ± 0.10 (0.23)	1.14 ± 0.19 (0.29)	*0.00	*(0.54)	*(10.64)	0.07
0000-TR-120424-01-03	0.83 ± 0.13 (0.26)	1.04 ± 0.20 (0.28)	*0.00	*(0.53)	*(10.39)	0.02
0000-TR-120424-01-04	0.78 ± 0.11 (0.24)	0.93 ± 0.20 (0.30)	*0.00	*(0.55)	*(9.71)	0.00
0000-TR-120424-01-05	0.87 ± 0.12 (0.23)	0.00 ± 0.00 (0.44)	*0.00	*(0.52)	*(9.49)	0.00
0000-TR-120424-01-06	0.78 ± 0.11 (0.21)	0.97 ± 0.18 (0.27)	*0.00	*(0.51)	*(8.96)	0.00
0000-TR-120424-01-07	0.63 ± 0.10 (0.20)	0.85 ± 0.20 (0.31)	*0.00	*(0.50)	*(9.43)	0.00
0000-TR-120424-01-08	0.84 ± 0.10 (0.21)	0.75 ± 0.17 (0.30)	*0.00	*(0.48)	*(8.89)	0.00
0000-TR-120424-02-01	0.87 ± 0.13 (0.23)	1.00 ± 0.20 (0.30)	*0.00	*(0.50)	*(9.91)	0.00
0000-TR-120424-02-02	0.79 ± 0.11 (0.23)	0.95 ± 0.19 (0.30)	*0.00	*(0.49)	*(9.56)	0.00
0000-TR-120424-02-03	0.75 ± 0.12 (0.24)	0.90 ± 0.19 (0.27)	*0.00	*(0.34)	*(9.58)	0.00
0000-TR-120424-02-04	0.69 ± 0.11 (0.22)	0.89 ± 0.21 (0.35)	6.58	0.20 ± 0.24 (0.40)	*(10.16)	0.00
0000-TR-120424-02-05	0.79 ± 0.11 (0.21)	0.95 ± 0.20 (0.32)	*0.00	*(0.50)	*(10.03)	0.00
0000-TR-120424-02-06	0.76 ± 0.10 (0.17)	0.73 ± 0.15 (0.32)	*0.00	*(0.47)	*(9.71)	0.00
0000-TR-120424-02-07	0.81 ± 0.10 (0.16)	0.90 ± 0.18 (0.27)	6.74	0.21 ± 0.21 (0.35)	*(9.83)	0.00
0000-TR-120424-02-08	0.69 ± 0.10 (0.18)	0.00 ± 0.00 (0.46)	5.92	0.18 ± 0.21 (0.35)	*(9.74)	0.00
0000-TR-120425-01-01	0.97 ± 0.12 (0.23)	0.91 ± 0.16 (0.29)	0.00	*(0.52)	*(9.20)	0.04
0000-TR-120425-01-02	0.97 ± 0.11 (0.18)	0.00 ± 0.00 (0.44)	*0.00	*(0.52)	*(9.51)	0.04
0000-TR-120425-01-03	0.86 ± 0.11 (0.18)	1.01 ± 0.20 (0.32)	*0.00	*(0.31)	*(9.59)	0.01
0000-TR-120425-01-04	0.96 ± 0.11 (0.18)	1.06 ± 0.21 (0.29)	6.33	0.19 ± 0.22 (0.36)	*(9.18)	0.06
0000-TR-120425-01-05	0.85 ± 0.10 (0.18)	0.92 ± 0.18 (0.29)	15.49	0.48 ± 0.24 (0.39)	*(8.50)	0.01
0000-TR-120425-01-06	0.81 ± 0.10 (0.16)	1.01 ± 0.16 (0.26)	11.59	0.36 ± 0.26 (0.43)	*(9.44)	0.01
0000-TR-120425-01-07	0.73 ± 0.10 (0.21)	0.99 ± 0.17 (0.29)	14.51	0.45 ± 0.23 (0.37)	*(9.17)	0.01
0000-TR-120425-01-08	0.76 ± 0.10 (0.18)	0.94 ± 0.16 (0.24)	16.86	0.52 ± 0.22 (0.34)	*(9.17)	0.01
0000-TR-120425-01-09	0.76 ± 0.10 (0.18)	0.00 ± 0.00 (0.43)	13.38	0.41 ± 0.29 (0.47)	*(9.36)	0.01
0000-TR-120425-02-01	1.00 ± 0.12 (0.23)	0.83 ± 0.19 (0.33)	*0.00	*(0.49)	*(9.43)	0.05
0000-TR-120425-02-02	0.88 ± 0.12 (0.23)	0.97 ± 0.16 (0.30)	10.35	0.32 ± 0.26 (0.42)	*(10.02)	0.01
0000-TR-120425-02-03	0.83 ± 0.10 (0.21)	0.00 ± 0.00 (0.43)	8.49	0.26 ± 0.17 (0.28)	*(9.49)	0.01
0000-TR-120425-02-04	0.81 ± 0.11 (0.21)	0.89 ± 0.16 (0.28)	*0.00	*(0.49)	*(9.51)	0.00

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>					
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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120425-02-05	0.76 ± 0.10 (0.19)	0.75 ± 0.18 (0.27)	7.74	0.24 ± 0.17 (0.27)	*(9.87)	0.00
0000-TR-120425-02-06	0.68 ± 0.10 (0.10)	0.00 ± 0.00 (0.44)	9.12	0.28 ± 0.25 (0.42)	*(9.34)	0.01
0000-TR-120425-02-07	0.63 ± 0.11 (0.24)	0.65 ± 0.17 (0.30)	14.36	0.44 ± 0.28 (0.46)	*(9.87)	0.01
0000-TR-120425-02-08	0.75 ± 0.11 (0.16)	0.92 ± 0.20 (0.33)	16.68	0.51 ± 0.25 (0.40)	*(10.00)	0.01
0000-TR-120425-02-09	0.81 ± 0.11 (0.19)	0.86 ± 0.19 (0.26)	15.60	0.48 ± 0.28 (0.45)	*(8.98)	0.01
0000-TR-120426-01-01	0.94 ± 0.10 (0.18)	0.00 ± 0.00 (0.44)	28.16	0.87 ± 0.27 (0.42)	*(9.38)	0.04
0000-TR-120426-01-02	0.85 ± 0.11 (0.22)	0.96 ± 0.19 (0.30)	8.34	0.26 ± 0.19 (0.32)	*(9.03)	0.00
0000-TR-120426-01-03	1.01 ± 0.12 (0.23)	1.03 ± 0.20 (0.30)	15.01	0.46 ± 0.24 (0.38)	*(9.76)	0.08
0000-TR-120426-01-04	0.93 ± 0.11 (0.20)	0.90 ± 0.18 (0.35)	9.70	0.30 ± 0.25 (0.41)	*(10.22)	0.02
0000-TR-120426-01-05	0.86 ± 0.11 (0.23)	1.24 ± 0.22 (0.26)	*0.00	*(0.53)	*(9.27)	0.12
0000-TR-120426-01-06	0.85 ± 0.11 (0.21)	0.98 ± 0.19 (0.31)	7.71	0.24 ± 0.22 (0.37)	*(9.71)	0.00
0000-TR-120426-01-07	0.88 ± 0.11 (0.22)	0.93 ± 0.19 (0.31)	16.22	0.50 ± 0.27 (0.44)	*(9.73)	0.01
0000-TR-120426-01-08	0.89 ± 0.10 (0.02)	1.04 ± 0.19 (0.27)	6.29	0.19 ± 0.19 (0.32)	*(9.94)	0.02
0000-TR-120426-01-09	0.74 ± 0.10 (0.20)	1.01 ± 0.16 (0.29)	7.95	0.24 ± 0.27 (0.44)	*(9.53)	0.01
0000-TR-120426-02-01	0.91 ± 0.11 (0.21)	0.00 ± 0.00 (0.45)	22.41	0.69 ± 0.24 (0.38)	*(10.19)	0.02
0000-TR-120426-02-02	0.87 ± 0.11 (0.20)	0.87 ± 0.18 (0.24)	*0.00	*(0.51)	*(9.94)	0.00
0000-TR-120426-02-03	1.00 ± 0.12 (0.20)	0.91 ± 0.19 (0.28)	*0.00	*(0.50)	*(10.95)	0.05
0000-TR-120426-02-04	0.88 ± 0.12 (0.20)	0.91 ± 0.20 (0.33)	10.01	0.31 ± 0.30 (0.51)	*(10.08)	0.01
0000-TR-120426-02-05	0.74 ± 0.11 (0.19)	0.83 ± 0.17 (0.29)	*0.00	*(0.46)	*(9.09)	0.00
0000-TR-120426-02-06	0.76 ± 0.10 (0.16)	0.76 ± 0.16 (0.24)	12.33	0.38 ± 0.19 (0.30)	*(9.74)	0.01
0000-TR-120426-02-07	0.70 ± 0.10 (0.21)	0.88 ± 0.16 (0.28)	6.08	0.19 ± 0.21 (0.35)	*(9.10)	0.00
0000-TR-120426-02-08	0.70 ± 0.11 (0.22)	0.82 ± 0.17 (0.25)	18.93	0.58 ± 0.23 (0.37)	*(10.24)	0.01
0000-TR-120426-02-09	0.82 ± 0.11 (0.19)	0.91 ± 0.18 (0.23)	*0.00	*(0.49)	*(9.15)	0.00
0000-TR-120430-01-01	0.95 ± 0.11 (0.20)	0.87 ± 0.15 (0.25)	15.25	0.47 ± 0.26 (0.42)	*(9.48)	0.03
0000-TR-120430-01-02	0.78 ± 0.10 (0.18)	1.10 ± 0.19 (0.23)	18.69	0.57 ± 0.22 (0.34)	*(8.79)	0.06
0000-TR-120430-01-03	0.81 ± 0.11 (0.19)	1.02 ± 0.21 (0.32)	*0.00	*(0.54)	*(10.11)	0.01
0000-TR-120430-01-04	0.75 ± 0.09 (0.18)	0.73 ± 0.16 (0.28)	11.08	0.34 ± 0.22 (0.35)	*(8.31)	0.01
0000-TR-120430-01-05	0.83 ± 0.10 (0.17)	1.03 ± 0.16 (0.27)	6.55	0.20 ± 0.24 (0.39)	*(10.10)	0.02

Hematite Decommissioning Project	FSSFR Volume 2, Chapter 2: <i>Data Summary Report for Combined Reuse Stockpile 1-2</i>					
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Attachment 3 Box Counter Assay Results for Reuse Stockpile 1 and Reuse Stockpile 2						
Sample Reuse Stockpile 2	Ra-226 DCGL = 1.9 pCi/g Background = 0.9 pCi/g	Th-232 DCGL = 2.0 pCi/g Background = 1.0 pCi/g	U-234 DCGL = 195.4 pCi/g Inferred Results	U-235 DCGL = 51.6 pCi/g	U-238 DCGL =168.8 pCi/g	Sample SOF (Uniform DCGL)
0000-TR-120430-01-06	0.77 ± 0.10 (0.19)	0.85 ± 0.18 (0.30)	11.21	0.34 ± 0.25 (0.41)	*(9.25)	0.01
0000-TR-120430-02-01	0.87 ± 0.11 (0.17)	0.00 ± 0.00 (0.42)	7.94	0.24 ± 0.17 (0.27)	*(9.11)	0.00
0000-TR-120430-02-02	0.79 ± 0.11 (0.21)	0.80 ± 0.18 (0.28)	12.58	0.39 ± 0.23 (0.37)	*(10.11)	0.01
0000-TR-120430-02-03	0.82 ± 0.11 (0.23)	0.94 ± 0.20 (0.31)	*0.00	*(0.51)	*(10.50)	0.00
0000-TR-120430-02-04	0.65 ± 0.10 (0.21)	0.66 ± 0.16 (0.25)	22.10	0.68 ± 0.26 (0.42)	*(8.85)	0.01
0000-TR-120430-02-05	0.90 ± 0.11 (0.17)	0.81 ± 0.18 (0.32)	8.63	0.27 ± 0.29 (0.48)	*(10.73)	0.01
0000-TR-120430-02-06	0.72 ± 0.11 (0.20)	0.00 ± 0.00 (0.43)	7.99	0.25 ± 0.27 (0.44)	*(9.55)	0.00
0000-TR-120430-02-07	0.78 ± 0.10 (0.19)	0.77 ± 0.18 (0.29)	*0.00	*(0.49)	*(9.71)	0.00
0000-TR-120507-01-01	0.53 ± 0.12 (0.22)	0.00 ± 0.00 (0.43)	11.45	0.35 ± 0.28 (0.40)	*(8.84)	0.01
0000-TR-120507-02-01	0.75 ± 0.11 (0.18)	0.97 ± 0.20 (0.27)	*0.00	*(0.48)	*(9.61)	0.00
0000-TR-120507-02-02	0.78 ± 0.11 (0.22)	0.95 ± 0.20 (0.30)	*0.00	*(0.51)	*(10.82)	0.00
0000-TR-120508-01-01	0.66 ± 0.12 (0.21)	0.89 ± 0.16 (0.25)	11.69	0.36 ± 0.27 (0.37)	*(9.67)	0.01
0000-TR-120508-01-02	0.94 ± 0.13 (0.19)	0.78 ± 0.18 (0.33)	21.74	0.67 ± 0.39 (0.48)	*(10.60)	0.04
0000-TR-120508-01-03	0.80 ± 0.12 (0.19)	1.02 ± 0.18 (0.30)	8.72	0.27 ± 0.28 (0.43)	*(9.76)	0.02
0000-TR-120508-01-04	0.53 ± 0.14 (0.20)	1.04 ± 0.17 (0.26)	12.81	0.39 ± 0.25 (0.33)	*(9.87)	0.03
0000-TR-120508-01-05	0.71 ± 0.13 (0.21)	0.94 ± 0.16 (0.28)	*0.00	*(0.55)	*(9.52)	0.00
0000-TR-120508-02-01	0.71 ± 0.12 (0.21)	0.00 ± 0.00 (0.46)	*0.00	*(0.53)	*(10.16)	0.00
0000-TR-120508-02-02	0.71 ± 0.11 (0.20)	0.00 ± 0.00 (0.47)	*0.00	*(0.53)	*(10.27)	0.00
0000-TR-120508-02-03	0.74 ± 0.12 (0.23)	0.69 ± 0.19 (0.29)	9.58	0.29 ± 0.26 (0.42)	*(10.19)	0.01
0000-TR-120508-02-04	0.73 ± 0.14 (0.26)	0.80 ± 0.19 (0.32)	*0.00	*(0.38)	*(10.34)	0.00
0000-TR-120508-02-05	0.82 ± 0.12 (0.20)	0.92 ± 0.19 (0.26)	*0.00	*(0.38)	*(10.03)	0.00
0000-TR-120509-01-02	0.89 ± 0.13 (0.22)	1.04 ± 0.17 (0.24)	26.86	0.83 ± 0.43 (0.47)	*(9.44)	0.04
0000-TR-120509-01-03	0.88 ± 0.12 (0.18)	0.96 ± 0.17 (0.27)	18.56	0.57 ± 0.33 (0.40)	*(8.83)	0.01
0000-TR-120509-01-04	0.65 ± 0.12 (0.25)	1.13 ± 0.15 (0.31)	10.66	0.33 ± 0.26 (0.37)	*(9.79)	0.07
0000-TR-120509-02-06	0.69 ± 0.11 (0.18)	0.77 ± 0.17 (0.26)	18.35	0.56 ± 0.27 (0.44)	*(9.07)	0.01
0000-TR-120509-02-07	0.69 ± 0.10 (0.18)	0.80 ± 0.17 (0.27)	11.44	0.35 ± 0.21 (0.35)	*(9.41)	0.01
0000-TR-120509-02-08	0.67 ± 0.10 (0.22)	0.79 ± 0.18 (0.30)	14.79	0.46 ± 0.22 (0.35)	*(9.72)	0.01
0000-TR-120509-02-09	0.66 ± 0.10 (0.19)	0.81 ± 0.18 (0.27)	5.88	0.18 ± 0.20 (0.34)	*(8.99)	0.00

* (asterisk): Indicates measurement < HRGS Decision Level

APPENDIX A
ProUCL 5.1 OUTPUT

STATISTICAL SUMMARY FOR REUSE STOCKPILE 1

UCL Statistics for Uncensored Full Data Sets

User Selected Options

Date/Time of Computation ProUCL 5.17/6/2016 3:39:25 PM
From File SP1 Weighted SOF for Pro UCL.xls
Full Precision OFF
Confidence Coefficient 95%
Number of Bootstrap Operations 2000

Weighted SOF

General Statistics

Total Number of Observations	275	Number of Distinct Observations	275
		Number of Missing Observations	0
Minimum	0.0121	Mean	0.0966
Maximum	1.238	Median	0.0721
SD	0.1	Std. Error of Mean	0.00606
Coefficient of Variation	1.04	Skewness	6.531

Normal GOF Test

Shapiro Wilk Test Statistic	0.583	Shapiro Wilk GOF Test
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.209	Lilliefors GOF Test
5% Lilliefors Critical Value	0.0538	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)
95% Student's-t UCL	0.107	95% Adjusted-CLT UCL (Chen-1995)
		95% Modified-t UCL (Johnson-1978)
		0.109
		0.107

APPENDIX A

ProUCL 5.1 OUTPUT

Gamma GOF Test

A-D Test Statistic	2.974	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.766	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic		Kolmogorov-Smirnov Gamma GOF Test
	0.0741	
5% K-S Critical Value		Data Not Gamma Distributed at 5% Significance Level
	0.0557	
Data Not Gamma Distributed at 5% Significance Level		

Gamma Statistics

k hat (MLE)	2.051	k star (bias corrected MLE)	2.032
Theta hat (MLE)	0.0471	Theta star (bias corrected MLE)	0.0476
nu hat (MLE)	1128	nu star (bias corrected)	1117
MLE Mean (bias corrected)	0.0966	MLE Sd (bias corrected)	0.0678
		Approximate Chi Square Value (0.05)	1041
Adjusted Level of Significance		Adjusted Chi Square Value	1040
	0.0491		

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.104	95% Adjusted Gamma UCL (use when n<50)	0.104
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Lognormal GOF Test

Shapiro Wilk Test Statistic	0.988	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk P Value	0.835	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic		Lilliefors Lognormal GOF Test
	0.0276	
5% Lilliefors Critical Value		Data appear Lognormal at 5% Significance Level
	0.0538	
Data appear Lognormal at 5% Significance Level		

Lognormal Statistics

Minimum of Logged Data	-4.416	Mean of logged Data	-2.6
Maximum of Logged Data	0.213	SD of logged Data	0.69

Assuming Lognormal Distribution

95% H-UCL	0.102	90% Chebyshev (MVUE) UCL	0.107
95% Chebyshev (MVUE) UCL	0.113	97.5% Chebyshev (MVUE) UCL	0.121
99% Chebyshev (MVUE) UCL	0.137		

APPENDIX A
ProUCL 5.1 OUTPUT

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.107	95% Jackknife UCL	0.107
95% Standard Bootstrap UCL	0.107	95% Bootstrap-t UCL	0.11
95% Hall's Bootstrap UCL	0.116	95% Percentile Bootstrap UCL	0.107
95% BCA Bootstrap UCL	0.11		
90% Chebyshev(Mean, Sd) UCL	0.115	95% Chebyshev(Mean, Sd) UCL	0.123
97.5% Chebyshev(Mean, Sd) UCL	0.134	99% Chebyshev(Mean, Sd) UCL	0.157

Suggested UCL to Use

95% H-UCL 0.102

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ProUCL computes and outputs H-statistic based UCLs for historical reasons only.

H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.

It is therefore recommended to avoid the use of H-statistic based 95% UCLs.

Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.

APPENDIX B
ProUCL 5.1 OUTPUT**STATISTICAL SUMMARY FOR REUSE STOCKPILE 2**

UCL Statistics for Uncensored Full Data Sets

User Selected Options

Date/Time of Computation ProUCL 5.17/6/2016 3:48:38 PM
From File SP2 Weighted SOF for Pro UCL.xls
Full Precision OFF
Confidence Coefficient 95%
Number of Bootstrap Operations 2000

Weighted SOF

General Statistics

Total Number of Observations	288	Number of Distinct Observations	288
		Number of Missing Observations	0
Minimum	0.024	Mean	0.0989
Maximum	0.496	Median	0.0862
SD	0.0588	Std. Error of Mean	0.00346
Coefficient of Variation	0.594	Skewness	2.184

Normal GOF Test

Shapiro Wilk Test Statistic	0.851	Shapiro Wilk GOF Test	
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.13	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.0526	Data Not Normal at 5% Significance Level	

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.105	95% Adjusted-CLT UCL (Chen-1995)	0.105
		95% Modified-t UCL (Johnson-1978)	0.105

APPENDIX B

ProUCL 5.1 OUTPUT

	Gamma GOF Test	
A-D Test Statistic	1.026	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.759	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0572	Kolmogorov-Smirnov Gamma GOF Test
5% K-S Critical Value	0.0538	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

	Gamma Statistics		
k hat (MLE)	3.565	k star (bias corrected MLE)	3.53
Theta hat (MLE)	0.0277	Theta star (bias corrected MLE)	0.028
nu hat (MLE)	2053	nu star (bias corrected)	2033
MLE Mean (bias corrected)	0.0989	MLE Sd (bias corrected)	0.0526
		Approximate Chi Square Value (0.05)	1930
Adjusted Level of Significance	0.0492	Adjusted Chi Square Value	1929

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when $n \geq 50$)	0.104	95% Adjusted Gamma UCL (use when $n < 50$)	0.104
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Lognormal GOF Test

Shapiro Wilk Test Statistic	0.984	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk P Value	0.522	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.0272	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.0526	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-3.731	Mean of logged Data	-2.461
Maximum of Logged Data	-0.702	SD of logged Data	0.54

Assuming Lognormal Distribution

95% H-UCL	0.105	90% Chebyshev (MVUE) UCL	0.109
95% Chebyshev (MVUE) UCL	0.113	97.5% Chebyshev (MVUE) UCL	0.12
99% Chebyshev (MVUE) UCL	0.132		

APPENDIX B
ProUCL 5.1 OUTPUT

Nonparametric Distribution Free UCL Statistics
Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.105	95% Jackknife UCL	0.105
95% Standard Bootstrap UCL	0.105	95% Bootstrap-t UCL	0.105
95% Hall's Bootstrap UCL	0.106	95% Percentile Bootstrap UCL	0.105
95% BCA Bootstrap UCL	0.105		
90% Chebyshev(Mean, Sd) UCL	0.109	95% Chebyshev(Mean, Sd) UCL	0.114
97.5% Chebyshev(Mean, Sd) UCL	0.12	99% Chebyshev(Mean, Sd) UCL	0.133

Suggested UCL to Use

95% H-UCL 0.105

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ProUCL computes and outputs H-statistic based UCLs for historical reasons only.

H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.

It is therefore recommended to avoid the use of H-statistic based 95% UCLs.

Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.

APPENDIX C

ProUCL 5.1 OUTPUT

STATISTICAL SUMMARY FOR COMBINED REUSE STOCKPILE 1-2

UCL Statistics for Uncensored Full Data Sets

User Selected Options

Date/Time of Computation	ProUCL 5.18/3/2016 8:19:43 AM
From File	SP1-2 Weighted SOF for Pro UCL.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Weighted SOF

General Statistics

Total Number of Observations	563	Number of Distinct Observations	563
		Number of Missing Observations	0
Minimum	0.0121	Mean	0.0978
Maximum	1.238	Median	0.0805
SD	0.0818	Std. Error of Mean	0.00345
Coefficient of Variation	0.836	Skewness	6.279

Normal GOF Test

Shapiro Wilk Test Statistic	0.662	Shapiro Wilk GOF Test
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.166	Lilliefors GOF Test
5% Lilliefors Critical Value	0.0377	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)
95% Student's-t UCL	0.103	95% Adjusted-CLT UCL (Chen-1995)
		0.104
		95% Modified-t UCL (Johnson-1978)
		0.104

APPENDIX C
ProUCL 5.1 OUTPUT**Gamma GOF Test**

A-D Test Statistic	3.159	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.764	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0546	Kolmogorov-Smirnov Gamma GOF Test
5% K-S Critical Value	0.0394	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level**Gamma Statistics**

k hat (MLE)	2.61	k star (bias corrected MLE)	2.597
Theta hat (MLE)	0.0375	Theta star (bias corrected MLE)	0.0376
nu hat (MLE)	2939	nu star (bias corrected)	2924
MLE Mean (bias corrected)	0.0978	MLE Sd (bias corrected)	0.0607
Adjusted Level of Significance	0.0496	Approximate Chi Square Value (0.05)	2800
		Adjusted Chi Square Value	2799

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when $n \geq 50$)	0.102	95% Adjusted Gamma UCL (use when $n < 50$)	0.102
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Lognormal GOF Test

Shapiro Wilk Test Statistic	0.991	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk P Value	0.972	Data appear Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.0179	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.0377	Data appear Lognormal at 5% Significance Level

Data appear Lognormal at 5% Significance Level**Lognormal Statistics**

Minimum of Logged Data	-4.416	Mean of logged Data	-2.529
Maximum of Logged Data	0.213	SD of logged Data	0.621

Assuming Lognormal Distribution

95% H-UCL	0.102	90% Chebyshev (MVUE) UCL	0.105
95% Chebyshev (MVUE) UCL	0.109	97.5% Chebyshev (MVUE) UCL	0.114
99% Chebyshev (MVUE) UCL	0.124		

APPENDIX C

ProUCL 5.1 OUTPUT

Nonparametric Distribution Free UCL Statistics

Data appear to follow a Discernible Distribution at 5% Significance Level

Nonparametric Distribution Free UCLs

95% CLT UCL	0.103	95% Jackknife UCL	0.103
95% Standard Bootstrap UCL	0.103	95% Bootstrap-t UCL	0.105
95% Hall's Bootstrap UCL	0.106	95% Percentile Bootstrap UCL	0.104
95% BCA Bootstrap UCL	0.105		
90% Chebyshev(Mean, Sd) UCL	0.108	95% Chebyshev(Mean, Sd) UCL	0.113
97.5% Chebyshev(Mean, Sd) UCL	0.119	99% Chebyshev(Mean, Sd) UCL	0.132

Suggested UCL to Use

95% H-UCL 0.102

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

Recommendations are based upon data size, data distribution, and skewness.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.

ProUCL computes and outputs H-statistic based UCLs for historical reasons only.

H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.

It is therefore recommended to avoid the use of H-statistic based 95% UCLs.

Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.