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Title:	LANL Environmental ALARA Program Status Report for CY 2016
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Intended for:	Los Alamos Field Office, Environmental Projects

Los Alamos
NATIONAL LABORATORY
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Form 836 (7/06)

LANL Environmental ALARA Program Status Report for CY 2016

Introduction

Los Alamos National Laboratory (LANL) ensures that radiation exposures to members of the public and the environment from LANL operations, past and present, are below regulatory thresholds and are as low as reasonably achievable (ALARA) through compliance with DOE Order 458.1 *Radiation Protection for the Public and the Environment*, and LANL Policy 412 *Environmental Radiation Protection* (LANL2016a). In 2007, a finding (RL.2-F-1) and observation (RL.2-0-1) in the NNSA/ LASO report, *September 2007, Release of Property (Land) Containing Residual Radioactive Material Self-Assessment Report,* indicated that LANL had no policy or documented process in place for the release of property containing residual radioactive material. In response, LANL developed *PD410, Los Alamos National Laboratory Environmental ALARA Program.* The most recent version of this document became effective in 2014 (LANL 2014a). The document provides program authorities, responsibilities, descriptions, processes, and thresholds for conducting qualitative and quantitative ALARA analyses for prospective and actual radiation exposures to the public and to the environment resulting from DOE activities conducted on the LANL site.

PD410 also specifies requirements for reporting program status to the NNSA/ Los Alamos Field Office:

> If the potential dose from a chosen ALARA alternative exceeds 10 mrem TEDE[1] to any member of the public per year or a collective dose of 100 person-rem TEDE per year, the National Nuclear Security Administration/ Los Alamos Site Office (NNSA/ LASO) will be notified in writing.
>
> In addition, a report summarizing the activities of the program is submitted to NNSA/ LASO for the previous calendar year no later than the end of the first quarter of the following year. This report describes any changes to the Laboratory Environmental ALARA Program, including organizational structure, responsibilities, and authorities. All environmental ALARA records for the previous calendar year generated as a result of implementing the program are submitted to the NNSA/ LASO as an appendix to the report. These records include letters, determinations, and analysis reports.

The remainder of this report provides the information required by *PD410*.

Exceedances of Potential Doses from ALARA Alternatives

During 2016, there were no potential doses in any alternative assessed that exceeded either: 1) 10 mrem TEDE to any member of the public per year, or, 2) a collective dose of 100 person-rem TEDE per year. Related, the annual dose to the Maximally Exposed Individual (MEI) in 2015 was 0.13 mrem while the collective population dose was 0.06 person-rem. Both of these doses are well within dose limits and ALARA considerations (LANL 2016b).

[1] TEDE- Total Effective Dose Equivalent

Summary of Environmental Radiation Protection ALARA Activities

Changes to the Program and Associated Documents

1) Administration of Order 458.1

The LANL ALARA program for public radiation exposure was implemented in 2011 and found to be in compliance with DOE Order 458.1, and with Change 3 (LANL 2014b, LANL 2016a). There were no changes made to the LANL environmental ALARA program in 2016.

Implementation of Environmental ALARA

1) Release of personal and real property to the public

Land Transfer- Specific activities in 2015-2016 included dose assessments and ALARA analyses that were performed for the conveyance of land under Public Law 105-119. Land tracts C-2, C-3, C-4, and A-16-b, A-16-c, and A-16-d are candidates for transfer from the DOE to Los Alamos County (LANL 2015). Of these, only tract C-2 required an ALARA analysis. The background subtracted all pathway dose for tract C-2, as calculated from radionuclide concentrations in the sediment, was 3.8 mrem/yr, which exceeded the LANL 3 mrem/yr ALARA threshold (Attachment 1). This ALARA analysis concluded that the cost for additional cleanup to lower doses beyond the 3.8 mrem/yr dose rate was not justified. The dose and ALARA assessments for each of these tracts were independently validated by the DOE Field Office and its subcontractor. Tract C-3 (the main hill road) was effectively transferred to Los Alamos County in 2016, and the other two tracts are scheduled to be conveyed in 2017.

Metal Recycling- Using processes defined in LANL procedures, and in compliance with DOE O458.1, approximately 1,620,000 lbs of unencumbered metal (i.e., outside the DOE metal moratorium) were released from LANL's LANSCE accelerator for metal recycle. Because these metals were potentially activated, systematic measurements for any residual radioactivity were performed, and released metals were required to pass "indistinguishable from background" criteria. These metal releases were independently reviewed by DOE prior to release for recycling

Decommissioning and Demolition- A number of buildings and materials that were potentially radiologically impacted were surveyed using the Multi-Agency Radiation Survey and Assessment for Materials and Equipment (MARSAME) protocol prior to release. Depending on the disposition path, criteria for public release of materials with residual radioactivity include being indistinguishable from background or based on a dose threshold of 1 mrem/yr, which are considered ALARA. Casa 2 and Casa 3 were D&D'd during 2016. None of these building materials were released to the public. The Press Building at TA-3 was undergoing D&D in 2016. Building materials from the radiologically non-impacted portions of the Press Building were surveyed for residual radioactive materials, found to be indistinguishable from background, and released for unrestricted disposition or recycled. The portion of the building that contain the press is still being evaluated for potential release pathways.

2) Authorized Limits

Screening Action Levels (SALs) for radionuclides in soils are evaluated every year to determine if an update is needed. In 2016, recalculation of the SALs was required due to a significant update to version 7.0 of the dose assessment code RESRAD (Yu et al. 2001) and to use “reference person” dosimetry. SALs were recalculated for common LANL-derived radionuclides (LANL 2016c), and LANL requested DOE authorization for the new SALs in 2016. Changes in the SALs will affect dose estimates for some nuclides, which could impact ALARA evaluations for future land conveyance tracts.

3) Integrated Review Tool

The EPC-ES Environmental Health Physics program reviewed numerous projects through the Project Review and Requirements Identification tool (PR-ID) in 2016. Through the PR-ID tool, EPC-ES health physicists primarily support LANL Air Quality (Rad-NESHAPs) and Radiological Engineering design reviews for new facilities and facility modifications. Several projects were identified which had potential environmental and public dose implications. However, no projects resulted in individual or collective doses above the thresholds for formal ALARA review.

Attachments

Attachment 1: Dose assessment of Los Alamos National Laboratory-Derived residual radionuclides in soils within C Tracts (C-2, C-3, and C-4) for land transfer decisions

References

Department of Energy, 2013. Order 458.1 Radiation Protection of the Public and the Environment. Administrative Change 3. 2013 January 15.

Los Alamos National Laboratory (LANL) 2014b. Los Alamos National Laboratory Environmental ALARA Program. LANL Policy 410.

Los Alamos National Laboratory (LANL) 2014a. Radiation Protection. LANL Policy 121, R4.

Los Alamos National Laboratory (LANL) 2015. Dose assessment of Los Alamos National Laboratory-derived residual radionuclides in soils within C Tracts (C-2, C-3, and C-4) for land transfer decisions. LA-UR-16-20394 (formerly LA-UR-15-24595).

Los Alamos National Laboratory (LANL) 2016a. Environmental Radiation Protection. LANL Policy 412.

Los Alamos National Laboratory (LANL) 2016b. Los Alamos National Laboratory 2015 Annual Site Environmental Report. Los Alamos National Laboratory Report LA-UR-16-26788.

Los Alamos National Laboratory (LANL) 2016c. Derivation of Authorized Limits for Land Transfer at Los Alamos National Laboratory. Los Alamos National Laboratory report LA-UR-16-27038.

Yu CA, Zielen AJ, Cheng J-J, LePoire DJ, Gnanapragasam E, Kamboj S, Arnish J, Wallo III A, Williams WA, Peterson H. 2001. User's manual for RESRAD Version 6, ANL/EAD-4, Environmental Assessment Division, Argonne National Laboratory, Argonne, IL.

Attachment 1

Dose Assessment of Los Alamos National Laboratory-Derived Residual Radionuclides in Soils within C Tracts (C-2, C-3, and C-4) for Land Transfer Decisions

April 2015- Final

LA-UR-15-24595

1.0 Background for C Tracts Dose Assessment

1.1 Site Location

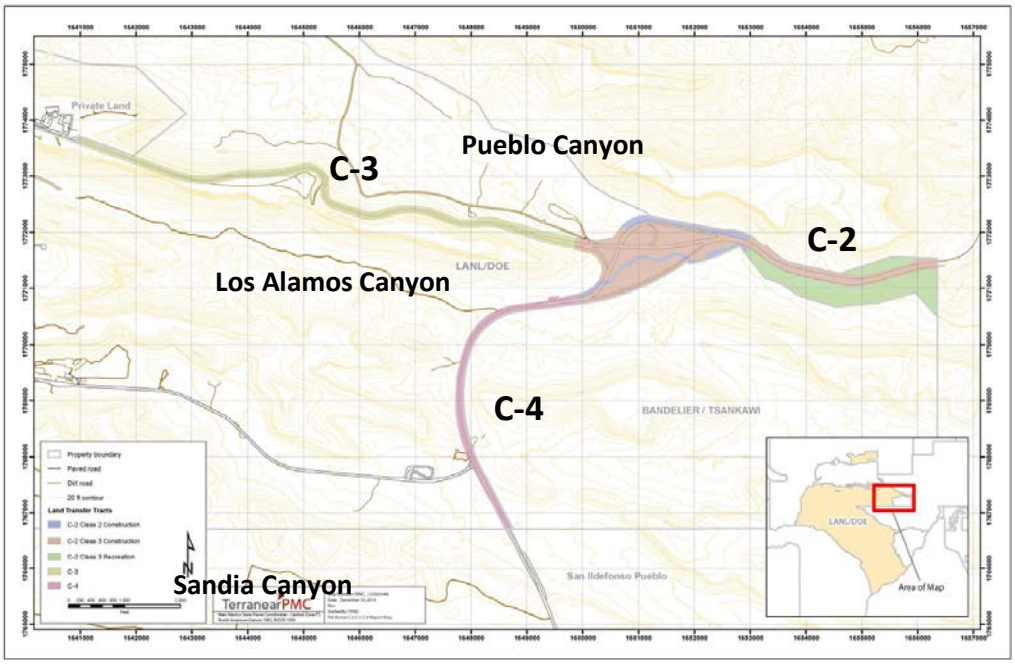
The C-2 tract contains the interchange between New Mexico State Road 502 (NM 502) and New Mexico State Road 4 (NM 4) commonly known as the "White Rock Y" interchange. This tract extends east and south of the White Rock Y along NM 502, widening out to contain undeveloped hillslope and canyon bottom areas, as well as the utility corridor areas along the highways and incorporated into the interchange. Tract C-2 also represents the confluence of drainages from Los Alamos Canyon and Pueblo Canyon (see Figure 1). Tract C-2 is approximately 110 acres in area.

The C-3 tract extends approximately one mile along NM 502 from the intersection with East Gate Drive on the west end to the White Rock Y interchange on the east end, encompassing the "Front Hill Road". This tract is approximately 54 acres including NM 502 highway, utility corridor areas, hill slope, and canyon wall on either side of the highway (see Figure 1).

The C-4 tract extends along NM 4 to the southwest of the White Rock Y intersection. The parcel follows NM 4 approximately 1000 feet south of its intersection with East Jemez Road. This tract is approximately 18 acres and includes the highway itself, utility corridor areas, and undeveloped hill slope on either side of the highway. Sandia Canyon crosses the eastern boundary of LANL and the associated drainage passes under NM 4 in this tract (see Figure 1).

All three of the C tracts were found to have no further action needed for non-radioactive constituents[1]. This dose assessment is specific to radioactive materials in soil/sediment samples.

Figure 1. Map of the C Tracts



[1] See Section 3.2 of the Environmental Baseline Survey Reports for C tracts; draft versions available at the time of this writing (LANL 2002a, 2002b, 2003)

1.2 Sampling and Analysis Plan

Three separate Sampling and Analysis Plans (SAPs) were prepared for tracts C-2, C-3, and C-4 (see Appendices A, B, and C, respectively) using a MARSSIM (2000) approach, as required in DOE Order 458.1 and LANL procedures (LANL 2012 and LANL 2014a). The objective of sampling was to confirm, within the stated statistical confidence limits, that the mean levels of potential radioactive residual contamination in soils in the C Tracts are documented, in appropriate units, and are below the 15 $\frac{\text{mrem}}{\text{y}}$(150 $\frac{\mu\text{Sv}}{\text{y}}$) Screening Action Levels (SALs) (LANL 2014b).

The sample locations for the C Tracts are illustrated in Figures 2 through 6. A total of eight decision areas were used for the three C Tracts. Within Tract C-2, focused sampling was conducted within the drainages and these areas were treated as Class II. All other decision areas were Class III and construction use scenario, with the exception of the canyon wall areas (green area in Figures 1-4), which was considered Class III and recreational use scenario.

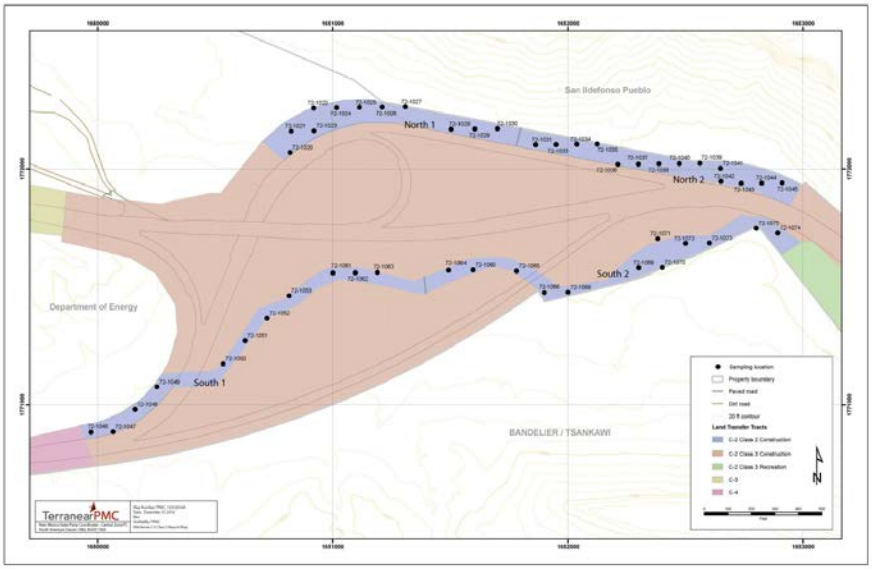


Figure 2. Sampling locations within four Class II construction use decision areas in C-2 (North 1, North 2, South 1, and South 2). Systematic grid sampling was used in these decision areas.

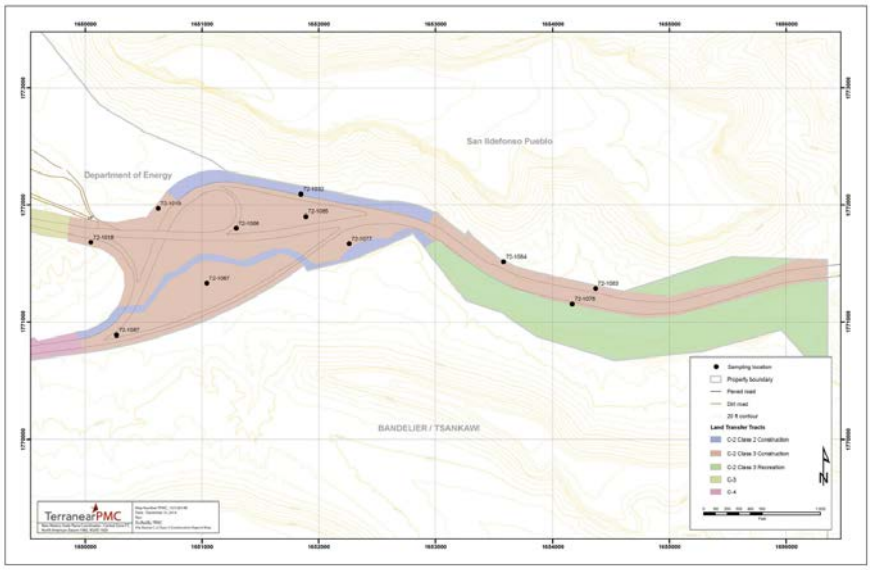


Figure 3. Sampling locations within the Class III construction use decision area in C-2

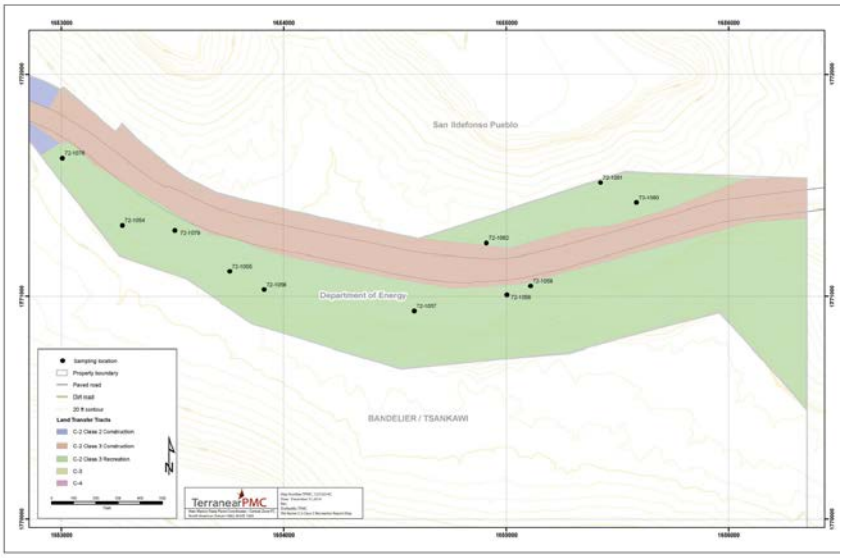


Figure 4. Sampling locations within the Class III recreational use decision area in C-2

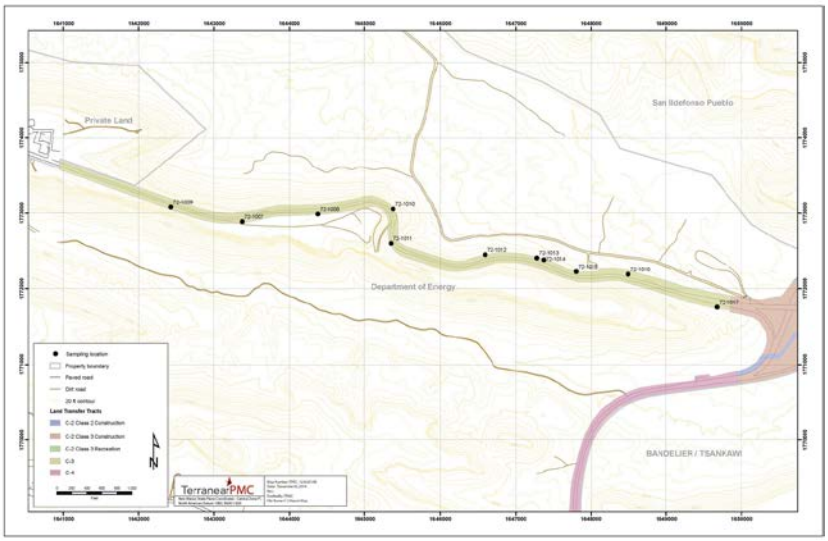


Figure 5. Sampling locations within the Class III construction use decision area in C-3

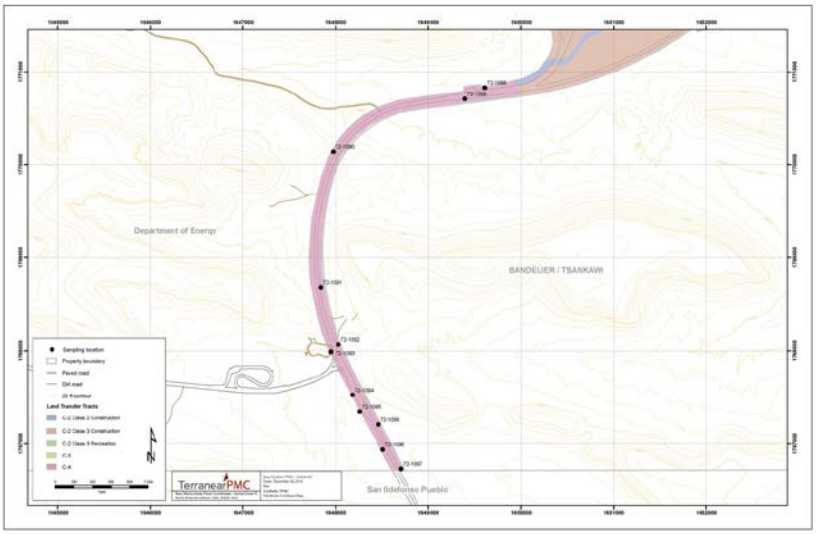


Figure 6. Sampling locations within the Class III construction use decision area in C-4

1.2.1 Preliminary Results from Surveys for Residual Contamination

As detailed in the SAPs, preliminary measurements of soil concentrations were used as preliminary data to determine the potential for soil contamination in the tract and the standard deviation in radionuclide measurements. The Sign Test was used to determine the number of samples required in the final surveys, as outlined in MARSSIM.

The same preliminary data was used for all three C Tracts. Pu-239 data had a mean of 1.22 pCi/g and a standard deviation of 2.02 pCi/g, which compared to a nominal background level for Pu-239 of 0.054 pCi/g (Ryti et al 1998). All radionuclide concentrations in these historical data were substantially below the SALs for both construction worker use (72 pCi/g) and recreational use (770 pCi/g). Similarly, Cs-137 concentrations in soil and sediment immediately upgradient of the C-2 tract were assessed (1.7 ± 1 pCi/g) and were within the range of background (1.6 pCi/g). These two nuclides were expected to be the primary contributors to dose of LANL origin in the C Tracts.

1.3 Statistical Analysis

The principle study question was: Does the residual radioactive contamination exceed Authorized Limits (ALs), individually or collectively, for the construction worker or recreational exposure scenario?

The decision alternatives were:

- If results from the soil radioactive contamination measurements are at or above the AL (collectively), the site is not a candidate for land transfer.
- If results from the soil radioactive contamination measurements are below the AL (collectively), the site is a candidate for land transfer.

The decision rule was based on the null hypothesis that the mean residual contamination levels in soil and/or sediment in the tracts, individually or combined over all radionuclides, are above the ALs and likely to result in an all pathway radiation dose to the critical receptor above 15 $\frac{\text{mrem}}{\text{y}}$(150 $\frac{\mu\text{Sv}}{\text{y}}$). The alternative hypothesis is that the mean residual contamination levels in soil and/or sediment in the tracts, individually or combined over all radionuclides, is below the AL and unlikely to result in an all pathway radiation dose to the critical receptor above 15 $\frac{\text{mrem}}{\text{y}}$(150 $\frac{\mu\text{Sv}}{\text{y}}$) (LANL 2014a, 2014b).

The assumed future land use and exposure pathway assumes construction worker exposure scenario for all areas within the tracts except for the recreational use corridor along NM 502 on the Eastern side of C-2. Based on the preliminary results and process knowledge, the radionuclides analyzed for compared to their respective construction worker ALs were Am-241, Co-60, Cs-134, Pu-238, Pu-239, H-3, Sr-90, U-234, U-235, and U-238. The 15 $\frac{\text{mrem}}{\text{y}}$(150 $\frac{\mu\text{Sv}}{\text{y}}$) ALs used in this analysis were calculated using RESRAD (RESRAD 2001), as documented in LANL (2014b).

1.3.1 Statistical Evaluation of the Survey Results

All the applicable data that passed the Measurement Quality Objective (MQO) evaluation was used to determine the upper-bound 95% confidence level (UCL) estimate of the mean for soil concentrations for each radionuclide. The EPA software ProUCL (EPA 2013) was used to determine the UCLs. The analyses were done at an independent laboratory and all passed requisite DQOs, as required for the comparisons to the ALs.

The statistical decisions as to whether the residual soil contamination levels (i.e., the 95 percent UCLs) were below the authorized limits in each decision area were evaluated using the following criteria.

Decision Criteria:

1) If all samples are ≤ construction or recreational ALs, then no further action is required and the site passes the criteria for planned use. No further actions are needed.
2) If all samples or the UCL are > the AL, then the site is not a candidate for release and site remediation is needed followed by resampling before it can be released.
3) If the UCL is below the AL but some individual measurements are above the AL, then statistical analysis is needed. Generally, non-parametric statistical approaches are used to evaluate the null hypothesis. If contamination is present in background, the Wilcoxon Rank Sum test is suggested, and if contamination is not present in background or very low relative to the AL, use the Sign Test. In this report, the Sign Test will be used with a $p < 0.05$ decision threshold for significance. See MARSSIM Chapter 8 for details and examples.
4) Because of multiple radionuclides, we also tested that the ratio of the UCL of the average concentration divided by the AL and the sum of the ratios did not exceed 1, as show in eqn. 1.

$$\sum_{i-1}^{n} \frac{\overline{C}_{UCL,i}}{C_{AL}} \leq 1 \qquad \text{(eqn.1)}$$

Here $\overline{C}_{UCL}$ is the 95 percent upper bound estimate of the concentration mean, C_{AL} is the construction or recreational AL ($15 \frac{\text{mrem}}{\text{y}}$($150 \frac{\mu\text{Sv}}{\text{y}}$)).

1.3.2 ALARA Evaluation

LANL Program Description 410 "Los Alamos National Laboratory Environmental ALARA Program" (LANL 2011) requires an ALARA evaluation based on procedure SOP-5254 "Performing ALARA Analysis for Public Exposures" (LANL 2009). If the calculated individual dose exceeds $3 \frac{\text{mrem}}{\text{y}}$($30 \frac{\mu\text{Sv}}{\text{y}}$), then a quantitative ALARA evaluation is performed.

1.4 Instrumentation and Measurement Quality Objectives

The main objectives are to determine an appropriate analysis technique for each radionuclide and ensure Measurement Quality Objectives (MQOs) are satisfied. One should be confident that the measurement results are valid and appropriate for the decisions being made.

1.4.1 Measurement Quality Objectives

- Detection Capability: Minimum Detection Concentration (MDC) should be below the MARSSIM defined Lower Bound of the Gray Region (LBGR).
- The degree of measurement uncertainty (combined precision and bias) should be reported and the level reasonable relative to the needed accuracy of the decision and accounted for in the statistical analysis.
- Range of the instrument and measurement technique should be appropriate for the concentrations expected.
- The instrument and measurement technique should be specific for the radionuclide(s) being measured. Specificity is the ability of the measurement method to measure the radionuclide of concern in the presence of interferences.
- For field instruments, the instrument should be rugged enough to consistently provide reliable measurements. However, in this case, all samples will be analyzed in the laboratory.

2.0 Results and Analyses of Measurements

Appendix D provides averages, standard deviations, minimums, maximums, and 95 percent UCLs for each of the radionuclides by decision unit. These values are placed in the context of construction or recreational SALs (depending on the land use scenario), and soil background levels (Ryti et.al. 1998). Individual sampling location results for this project are included in Appendix E.

Results show that radionuclide concentration UCLs were close to background levels, with the exception of Pu-239 and Cs-137 being slightly elevated above background, and all measurements were below the ALs and meet the real property release criteria for future construction or recreational use. Table 1 and Figure 7 present results for each radionuclide for all three tracts collectively. The highest results for radionuclides of interest were 13.4 pCi/g for Cs-137 (location 72-1064 in decision unit C-2 South 2, Los Alamos Canyon drainage) and 3.7 pCi/g for Pu-239 (location 72-1038 in decision unit C-2 North 2, Pueblo Canyon drainage).

Doses were calculated using the soil concentrations and the 15 $\frac{\text{mrem}}{\text{y}}$(150 $\frac{\mu\text{Sv}}{\text{y}}$) SALs for each decision area (see Appendix D) and are summarized in Table 2. The projected UCL doses in Table 2 ranged from 0.08 to 5.31 $\frac{\text{mrem}}{\text{y}}$(0.8 to 53.1 $\frac{\mu\text{Sv}}{\text{y}}$) with an average of 1.35 $\frac{\text{mrem}}{\text{y}}$(13.5 $\frac{\mu\text{Sv}}{\text{y}}$).

Table 1. Soil concentrations of radionuclides for all C Tracts collectively (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	92	92	62	91	92	92	92	92	92	92	92
Mean	0.06	0.00	0.09	0.47	0.13	0.01	0.34	0.08	1.30	0.08	1.31
Median	0.01	0.00	0.08	0.17	0.05	0.00	0.04	0.05	1.29	0.08	1.29
Minimum	-0.01	-0.06	0.03	-0.03	-0.79	-0.01	0.00	-0.27	0.40	-0.01	0.45
Maximum	0.69	0.08	0.17	13.40	2.88	0.08	3.73	1.46	2.31	0.21	2.41
STD	0.11	0.03	0.03	1.48	0.44	0.01	0.61	0.23	0.33	0.03	0.33
UCL (ProUCL 95%)	0.11	0.01	0.09	1.15	0.32	0.01	0.62	0.19	1.35	0.08	1.36
Background	0.01	0.00	0.00	1.65	0.01	0.02	0.05	1.31	2.59	0.20	2.29
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250

Figure 7. Box plots of all nuclides across all decision units in the C Tracts.

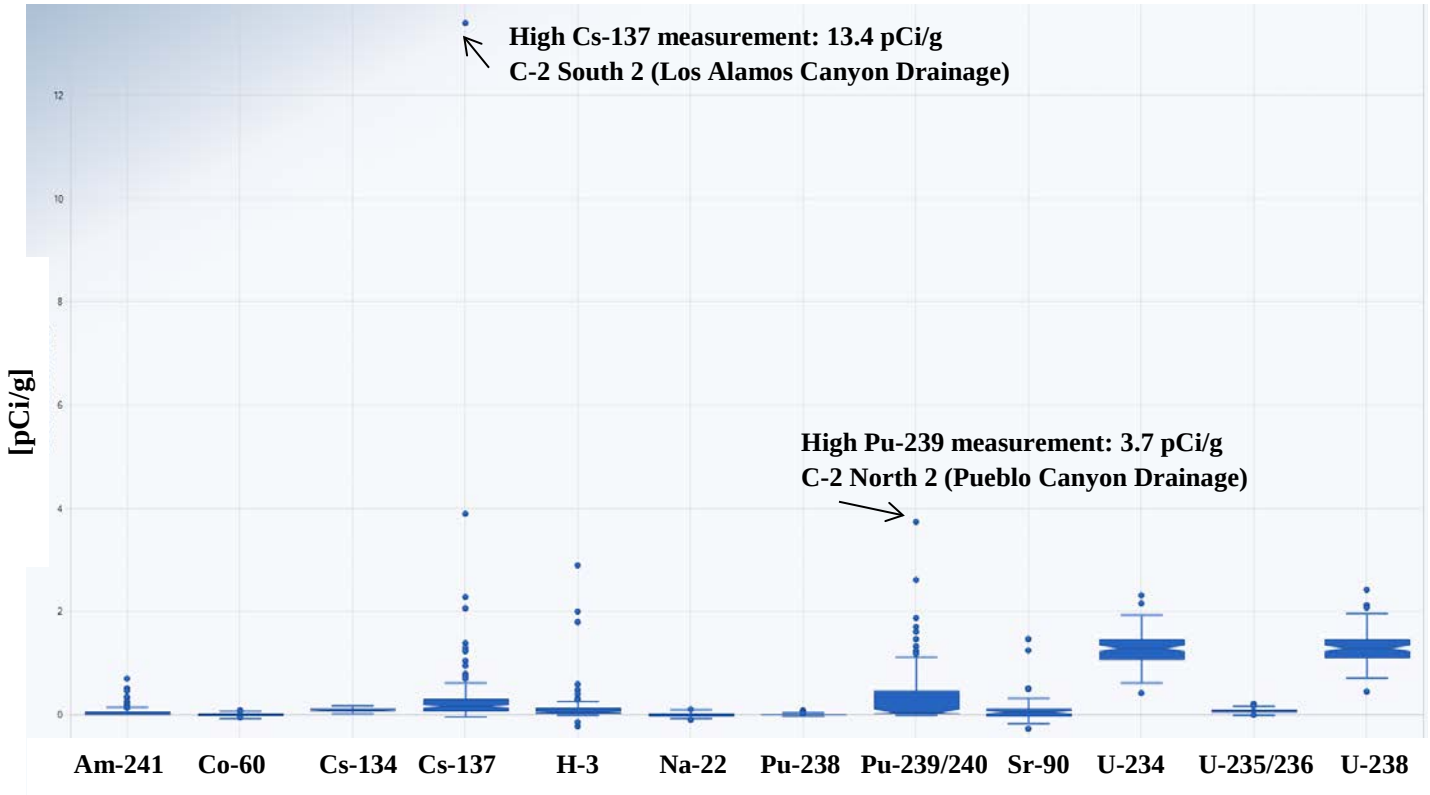


Table 2. C Tract doses by decision unit based on 15 mrem/y (150 µSv/y) SALs and summary statistics in units of mrem/y. Values should be multiplied by 10 to obtain results in µSv/y. The highlighted dose for decision unit C-2 South 2 is above the 3 mrem/y (30 µSv/y) ALARA evaluation trigger level

Doses By Area (mrem/y)	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238	Sum
C-2 North 1	0.01	0.08	0.22	0.14	0.00	0.00	0.29	0.00	0.04	0.02	0.08	0.89
C-2 North 2	0.01	0.04	0.21	0.11	0.00	0.00	0.26	0.00	0.04	0.02	0.08	0.78
C-2 South 1	0.05	-0.03	0.22	0.97	0.00	0.01	0.07	0.01	0.05	0.02	0.09	1.46
C-2 South 2	0.08	0.07	0.26	4.60	0.00	0.01	0.16	0.01	0.04	0.02	0.08	5.31
C-2 Class III Construction	0.01	0.05	0.15	0.12	0.00	0.00	0.35	0.00	0.05	0.03	0.09	0.86
C-2 Class III Recreation	0.00	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.08
C-3	0.00	0.12	0.22	0.30	0.00	0.00	0.01	0.00	0.06	0.03	0.11	0.85
C-4	0.00	0.06	0.19	0.16	0.00	0.00	0.00	0.00	0.04	0.02	0.07	0.56

*Doses in blue based on recreational SALs

Summary Statistics	**Average**	**1.35**	**mrem/y**
	STD	**1.65**	**mrem/y**
	Max	**5.31**	**mrem/y**
	Min	**0.08**	**mrem/y**

2.1 ALARA Analysis

The calculated 5.31 $\frac{\text{mrem}}{\text{y}}$(53.1 $\frac{\mu\text{Sv}}{\text{y}}$) dose in decision unit C-2 South 2 exceeded the 3 $\frac{\text{mrem}}{\text{y}}$(30 $\frac{\mu\text{Sv}}{\text{y}}$) threshold for ALARA evaluation (Table 2). The background soil concentrations from Ryti et al. (1998) were then subtracted from the soil UCLs for each radionuclide and the dose recalculated (see Appendix D). This background subtraction lowered the dose to about 3.8 $\frac{\text{mrem}}{\text{y}}$(38 $\frac{\mu\text{Sv}}{\text{y}}$), which is still above the ALARA level. Therefore, a cost analysis based on ALARA considerations was performed using LANL ALARA procedures and limits (LANL 2009, 2011), and the results are shown in Table 3.

The projected cumulative doses were based on the following equation:

$$\text{ALARA justified cost [\$]} = \frac{\$200}{\text{person} \cdot \text{mSv}}\left(\frac{0.15\ \text{mSv}}{\text{construction SAL}}\right)\left(\text{Bkg subtracted UCL}\left[\frac{\text{pCi}}{\text{g}}\right]\right)(20\ \text{construction workers})\left(\frac{\text{T}_{\text{R,Cs-137}}}{\ln(2)}\right)$$

Where $\frac{\text{T}_{\text{R,Cs-137}}}{\ln(2)} = 43$ years is the half time of Cs-137 (the primary contributor to dose) allowing for the maximum impact of this nuclide on dose to construction workers throughout its lifetime in the soil. This approach resulted in a collective dose of 3.3 person-rem (33 person-mSv) to construction workers, which compared to a 0.08 person-rem (0.8 person-mSv) dose using the default one year exposure consistent with DOE O 458.1 methods.

Using $2,000 per person-rem ($200 per person-mSv), the justified cost would be roughly $7,000 for 43 years of exposure (compared to only $150 for a one year exposure) to construction workers. The cost of a single sample to confirm any cleanup is about $2,000, and an entire cleanup of the localized contamination could easily cost > $10,000. Thus, we conclude additional remediation would not be justified under the ALARA analysis.

2.2 Quality Assurance

Soils were collected according to procedures and the laboratory analysis techniques were appropriate for the specific radionuclides, as required in the SAPs (Appendices A, B, and C). The analysis at the independent laboratory was within their predefined boundaries and met all quality assurance requirements. Only qualified data was used in this analysis and minimum detectable concentrations were below the LBGR. Thus, all measurement quality objectives were met for this data set.

2.3 Conclusion

Given that:

1) All measurements were below the ALs for each individual radionuclide
2) The sum of the ratios was below 1, and
3) The resulting combined calculated dose was less than the 15 $\frac{\text{mrem}}{\text{y}}$(150 $\frac{\mu\text{Sv}}{\text{y}}$) for a hypothetical construction worker or recreational user in each of the eight decision units

We conclude that all of the C Tracts are candidates for conveyance to the public for construction and future recreational use. A follow-up ALARA analysis showed that the costs of cleanup of the

soil in areas of elevated concentration and confirmatory sampling would far exceed any benefit from dose reduction. Specific sampling and dose assessments can be completed for more involved work if there are concerns of dose for specific jobs performed within the tract.

3.0 References

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Table 3. ALARA analysis for decision unit C-2 South 2 based on elevated measurements of Cs-137. Radionuclide concentrations are in pCi/g. Doses are presented in units of person-rem Values should be multiplied by 10 to obtain results in person-mSv.

Values for C-2 South 2	**Am-241**	**Co-60**	**Cs-134**	**Cs-137**	**H-3**	**Pu-238**	**Pu-239**	**Sr-90**	**U-234**	**U-235**	**U-238**
UCL (ProUCL 5.0) [pCi/g]	0.428	0.0185	0.132	5.514	0.22	0.027	0.748	0.749	1.335	0.0843	1.352
Background [pCi/g]	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
Adjusted UCL [pCi/g]	0.415	0.019	0.132	3.864	0.215	0.004	0.694	-0.561	-1.255	-0.116	-0.938
SAL for Construction	85	4	8	18	37000	79	72	980	460	61	250

Dose for Construction (collective person-rem)

	Am-241	**Co-60**	**Cs-134**	**Cs-137**	**H-3**	**Pu-238**	**Pu-239**	**Sr-90**	**U-234**	**U-235**	**U-238**	**Total**	**Total (positive only)**
1 Year	0.001	0.001	0.005	0.064	0.000	0.000	0.003	0.000	-0.001	-0.001	-0.001	0.073	0.075
43 Years = $\left(\frac{30}{\ln(2)}\right)$	0.063	0.059	0.223	2.787	0.000	0.001	0.125	-0.007	-0.035	-0.025	-0.049	3.142	3.258

ALARA justified cost for 1 year	$ 145.17	$ 150.54
ALARA justified cost for 43 years	$ 6,283.08	$ 6,515.48

Assumptions:

20 construction workers are exposed to soil at the background-subtracted UCL concentration over 1 year for the upper row (red) and 43 years for the conservative estimate (lower row). 43 years is the infinite dose-integrated time for Cs-137, which was the primary contributor to dose.

Appendix A

Sampling and Analysis Plan (SAP) for Assessment of LANL-Derived Residual Radionuclides in Soils within Tract C-2 for Land Transfer Decisions

1.0 Background for C-2[1]

1.1 Site Location

The C-2 tract contains the interchange between New Mexico State Road 502 (NM 502) and New Mexico State Road 4 (NM 4) commonly known as the "White Rock Y" interchange. This tract extends east and south of the White Rock Y along NM 502, widening out to contain undeveloped hillslope and canyon bottom areas, as well as the utility corridor areas along the highways and incorporated into the interchange (see Figure 1). Tract C-2 also represents the confluence of drainages from Los Alamos Canyon and Pueblo Canyon. The Pueblo Canyon drainage follows the northern edge of the western portion of the tract, while the Los Alamos Canyon drainage cuts through the middle of the western portion of the tract. These watersheds merge to the east of the interchange forming a single drainage south of NM 502. The legal property boundary description of this tract is provided by the Army Corps of Engineers Title Report, **"White Rock Y Site at Los Alamos, New Mexico"**, September 15, 1998.

[1] Much of the information in this section is directly from: Rae, K. 2009. Environmental Baseline Survey for C-2, White Rock Y-1 Tract, memo RRES/Ecol-0200037.

Figure 1. Aerial view of the C-2 tract and its spatial relation to Highways 502 and 4 at the "White Rock Y" interchange

The area is primarily covered in piñon-juniper woodlands and contains sensitive wildlife habitat. Specifically, habitat for the Mexican Spotted Owl overlaps this tract, and parts of the tract are foraging habitat for the bald eagle. Noise in the vicinity of this tract comes primarily from motor vehicles traveling along NM 502 and NM 4. There is a negligible amount of night-shine from the artificial light sources on the mesa top to the west.

1.2 General History

Prior to LANL occupancy, there was little modern development on the Pajarito Plateau, however the Plateau has been home to Native Americans for thousands of years. Historical maps from the pre-LANL era (1924), aerial photographs (1935), and historical accounts of life in the area indicate little development until 1917, when the Los Alamos Ranch School for boys was established. In the early 1920s, a man named Coomer leased land in Pueblo Canyon and built a cabin to use as a base for guided tours of the area. The lease was purchased in 1923 by a benefactor and was provided to the Los Alamos Ranch School as a base for outdoor activities for boys. As a result, the cabin came to bear the benefactor's name, Camp Hamilton, and was used by the school for nearly two decades. This camp is just west of the C-2 tract. A road connecting Los Alamos Mesa to Otowi Bridge was built in the 1920's and passed near the C-2 tract. The roads were expanded in later years into the tract.

1.3 Current Use

Tract C-2 is unoccupied land associated only with traffic through the interchange, construction, and utility work. Both the Pueblo and Los Alamos Canyon drainage areas are downstream of sediment retention structures designed to minimize movement of sediment.

No structures or facilities associated with LANL's federal, state, or local permits (such as air monitoring stations, radiation monitoring stations, or wastewater discharge outfalls) are located within the tract. The tract was never actively used by LANL, no LANL operations were conducted within the tract boundaries, and no LANL structures were situated within the tract.

1.4 Summary of Historical Evaluation of LANL Impact

There are no Potential Release Sites (PRSs) located on the C-2 tract; however, Tract C-2 includes alluvial floodplain sediment with residual contamination from historical upstream activities in both Pueblo and LA Canyons. Radioactive contamination, primarily Pu-239 and Cs-137, is found at levels above background in the sediment of both these canyons. Monitoring of radionuclides and other contaminants in sediment at the Los Alamos Canyon weir as well as the Pueblo Canyon weir have occurred historically.

1.4.1 Adjacent Properties with Known or Suspected Releases

Tract C-2 is situated at the confluence of two canyons, both of which have had known contamination events in the past. Thorough investigations of the contamination in these drainages are provided in investigation reports (LANL 2004). These reports show that the radioactive contamination is at levels that do not present a significant human health risk and that the downstream concentrations of the sediment through flooding do not appear to be increasing with time (Whicker et al. 2014).

1.5 Preliminary Results from Surveys for Residual Contamination

For the purpose of developing a MARSSIM-based sampling plan, previous Pu-239 data taken from 27 soil surface and sediment samples collected immediately upgradient of Tract C-2 were used to determine expected standard deviations for sample plan development (data obtained from INTELLUS 2013). The 27 data points representing sample collection from 1996 through 2014 had a mean of 1.22 pCi/g and a standard deviation of 2.02 pCi/g. This measurement information is provided in Table 1. These values compare to a nominal background level for Pu-239 of 0.054 pCi/g (Ryti et al 1998). All preliminary radionuclide concentrations in these historical data were substantially below the SALs for both construction worker use (72 pCi/g) and recreational use (770 pCi/g). Similarly, Cs-137 concentrations in soil and sediment immediately upgradient of the C-2 tract were assessed (1.7 ± 1 pCi/g) and were within the range of background (1.6 pCi/g). Thus, the preliminary analysis used only the Pu-239, and the levels of Cs-137 or any other gamma-emitting radionuclide do not justify a scan survey.

Table 1. Raw data used for preliminary analysis along with summary statistics and nominal background level for Pu-239

Field Sample ID	Date Sampled	Result [pCi/g]	Statistical Analysis: Pu-239 Concentration [pCi/g]	
CALA-07-4175	6/27/2007	0.777		
CALA-07-7023	9/27/2007	0.145	Mean	1.21783
LAWeirUS-07-798	5/16/2007	0.0058	Standard Error	0.38835
LAWeirUS-10-19282	8/19/2010	0.104	Median	0.165
LAWeirUS-10-19283	8/18/2010	0.0841	Mode	2.1

LAWeirUS-11-10832	5/25/2011	0.14	Standard Deviation	2.017924
LAWeirUS-11-10833	5/25/2011	0.212	Sample Variance	4.072018
SFB-12-13930	6/12/2012	0.0025	Range	7.9375
SFB-12-13931	6/12/2012	0.007	Minimum	0.0025
SFB08-08-12072	5/7/2008	0.617	Maximum	7.94
SFB08-08-12073	5/7/2008	0.0054	Sum	32.8814
SFB08-08-12074	5/14/2008	0.0033	Count	27
SFBLAW-13-36099	6/14/2013	0.047	Confidence Level (95.0%)	0.798264
SFBLAW-13-36100	6/14/2013	0.0194		
WIER-14-56713	5/28/2014	0.0553		
WIER-14-56714	5/28/2014	0.0276		
LAWeirUS-09-10497	7/1/2009	0.165		
CAPU-11-2391	12/2/2010	0.382		
04PU-96-0227	9/24/1996	2.1		
CAPU-03-51062	3/18/2003	3.73		
CAPU-03-51061	3/18/2003	2.88		
04PU-97-0048	5/14/1997	7.94		
04PU-97-0047	5/14/1997	4.73		
04PU-96-0227	9/24/1996	2.1		
CAPU-11-2393	12/2/2010	0.662		
04PU-97-0049	5/14/1997	5.22		
CAPU-01-0022	8/6/2001	0.72		

1.6 Conclusions regarding the classification of Tract C-2 relative to potential for residual radioactive contamination

The soil concentrations of Pu-239 in soil/sediment from the preliminary set of measurements suggest that general levels are likely to be substantially below all SALs for construction and recreational use and near background levels. Thus, DOE/NNSA believes no additional remedial activities are needed on the C-2 tract.

The areas associated with the floodplains qualify as Class 2 areas (i.e., potentially impacted with elevated concentrations of residual radioactive material in soils, but likely to be below thresholds for the intended land uses (MARSSIM 2000)). Class 2 areas are limited in size to 10,000 m^2, thus four Class 2 decision areas (North 1, North 2, South 1, and South 2) have been created within the tract. These four decision areas would be designated as construction use areas.

However, the majority of the C-2 tract qualifies as a Class 3 area under MARSSIM [i.e., not expected to contain any residual radioactivity or expected to contain levels that are close to background or at a small fraction of the threshold for intended use (MARSSIM 2000)]. The Class 3 designation is assigned to both construction and recreational use sections of this tract. The construction use decision area encompasses any area where soil is likely to be disturbed for construction or utility purposes. This includes the full corridor along NM 502, as well as the

White Rock Y interchange, except for the area previously described as Class 2 (drainages). The recreational use decision area includes the eastern portions of the tract bordering NM 502 outside of the construction corridor. Periodic recreation (hiking, biking, etc.) would define the exposure scenario. If future use designation changes in these areas, sampling plans for specifically identified exposure scenarios could be considered.

2.0 Data Quality Objectives for the Sampling and Analysis Plan

The sampling and analysis plans (SAPs) for Tract C-2 follows the LANL (2012b) procedure EDA-QP-238, **"Dose assessment data quality objectives for land transfers into the public domain."**

2.1 Objective of the SAP

The objective of this sampling and analysis plan is to confirm, within the stated statistical confidence limits, that the mean levels of potential radioactive residual contamination in soils in C-2 are documented in appropriate units, and are below the 15 mrem yr^{-1} for either public construction or recreational use. The Screening Action Levels (SALs) for recreational and construction worker scenarios are provided in Table 2. SALs, as derived in LANL (2012c), are used by LANL as preapproved Authorization Limits (ALs), as required in DOE Order 458.1 (section 2.k.(6)(f)2 in the contractors Requirements Document), and are identified as ALs in the rest of this SAP with regards to statistical decisions.

Table 2. Background levels and SALs based on an annual dose of 15 mrem (0.15 mSv) (LANL 2012, Table B-1)

Radionuclide	Background [pCi/g] (Ryti et al 1998)	SAL [pCi/g] 15 mrem/yr (0.15 mSv/yr)	
		Recreational	Construction Worker
Am-241	0.013	890	85
Cs-137	1.65	210	18
Co-60	-	46	4.1
Tritium (H-3)	0.08	4.3E5	3.7E4
Pu-238	0.023	850	79
Pu-239	0.054	770	72
Sr-90	1.31	3200	980
U-234	2.59	2300	460
U-235	0.2	570	61
U-238	2.29	1700	250

2.2 Decision Identification

The principle study question is: Does the residual radioactive contamination exceed ALs for the respective exposure scenarios in each of the decision areas within C-2? The decision alternatives are:

- If results from the soil radioactive contamination measurements are at or above the AL (collectively), the site is not a candidate for land transfer.

- If results from the soil radioactive contamination measurements are below the AL (collectively), the site is a candidate for land transfer.

2.3 Inputs into the Decision

The assumed near-term future land use and exposure pathway assumes both construction and recreational use. ALs used for all the radionuclides analyzed for and the respective SALs are provided in Table 2 and the derivation of the SALs is documented in LANL (2012c). The 15 mrem yr^{-1} SALs used in this analysis were calculated using RESRAD (RESRAD 2001).

Data to be used in the analysis include surface soil/sediment concentration measurements for radionuclides. The unity (sum of fractions) rule will be applied. The formula used in for the unity rule is:

Equation 1

$$\frac{C_1}{AL_1} + \frac{C_2}{AL_2} + \frac{C_3}{AL_3} \ldots\ldots \frac{C_n}{AL_n} \leq 1$$

where $C_{1\text{-}n}$ and $AL_{1\text{-}n}$ are the upper-bound estimates of the mean concentrations for radionuclides (e.g., upper 95% values) and Authorized Levels 1 through n, respectively.

2.4 Study Boundaries

The study is limited to Tract C-2, as identified in Figure 1. The list of radionuclides in the analysis includes: Am-241, Cs-137, Co-60, H-3, Pu-238, Pu-239, Sr-90, U-234, U-235, and U-238. Individual doses are evaluated out to 1000 years.

2.5 Decision Rule

The decision rule is based on the null hypothesis that the mean residual contamination levels in soil and/or sediment in Tract C-2 combined over all radionuclides is above the AL and likely to result in an all-pathway radiation dose to the critical receptor above 15 mrem/yr (0.15 mSv/yr). The alternative hypothesis is that the mean residual contamination levels in soil and/or sediment in Tract C-2 combined over all radionuclides is below the AL and not likely to result in an all-pathway radiation dose to the critical receptor above 15 mrem/yr (0.15 mSv/yr).

The C-2 Tract has been divided into six separate decision areas (Figure 2), addressed in the Attachments as follows:

1. Attachment 1 – Blue Decision Area North 1 (Class 2 / Construction)
2. Attachment 2 – Blue Decision Area North 2 (Class 2 / Construction)
3. Attachment 3 – Blue Decision Area South 1 (Class 2 / Construction)
4. Attachment 4 – Blue Decision Area South 2 (Class 2 / Construction)

5. Attachment 5 – Red Decision Area (Class 3 / Construction)
6. Attachment 6 – Yellow Decision Area (Class 3 / Recreational)

2.6 Limits on Decision Errors

The acceptable statistical errors for this analysis are that Type I error (i.e., conclude contamination levels at site are < AL when in fact it is > AL) has a probability of $p < 0.05$; and the Type II error is (i.e., conclude soil contamination level is > AL when in fact it is < AL) has a probability of $p < 0.1$. The distribution for the preliminary data is not assumed to be normal.

2.7 Optimization of Design Process

The survey design is optimized by analyzing historical data. Specifically, there is no evidence of radiological operations within Tract C-2, but the preliminary data suggest the sediment in the canyon drainages have been impacted by LANL operations even though the concentrations are expected to be substantially lower than the SALs. Therefore, the majority of the area will be treated as Class 3, optimizing the number of required sample locations based on construction and recreational land use outside the floodplain. Smaller sections directly along the drainages will be treated as Class 2 to ensure that enough emphasis is placed on detection of potentially elevated radionuclide concentrations. These areas were sampled using a grid pattern. Sampling areas for the full C-2 tract are included in Figure 2. If land use requirements change in the future, sampling could be targeted to the specific area of the proposed activity.

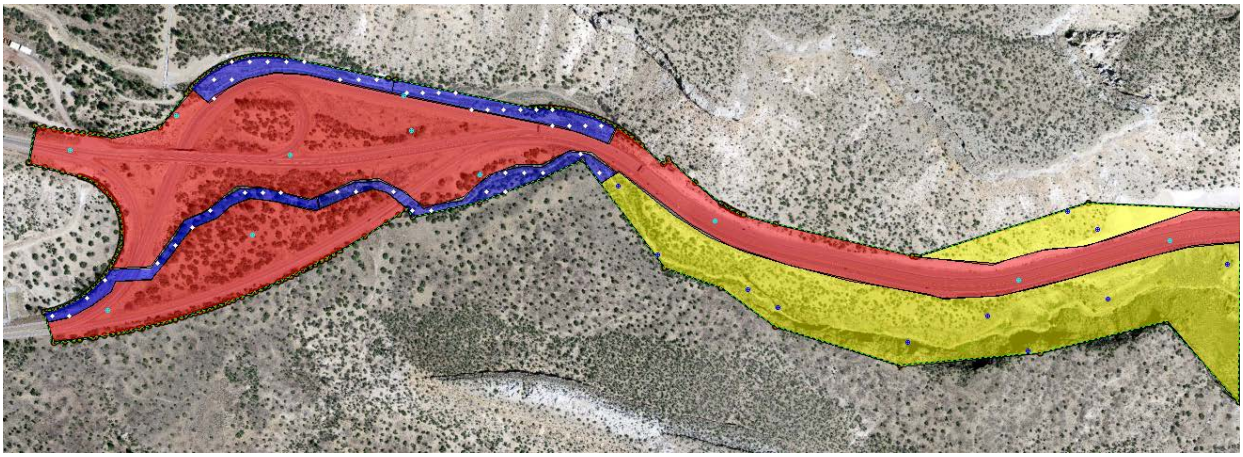

Figure 2. Map of decision areas and sampling locations in Tract C-2 including the North and South Class 2 decision areas (blue), the Class 3 construction decision area (red), and the Class 3 recreational decision area (yellow)

2.8 Statistically-Based Evaluation for Number of Samples Required using MARSSIM

Google Earth was used to plan sampling areas in Tract C-2, and a geo-referenced image file with an associated polygon (.shp) for the tract were incorporated into Visual Sampling Plan (VSP) software (Matzke et al. 2010). Sampling areas were drawn inside the initial polygon (Figure 2). The MARSSIM application within VSP was then used to determine the statistically-based sampling plan. The preliminary sampling data in Table 1 was used to determine the standard

deviations needed for calculating the needed number of samples for each of the identified radionuclides. All sampling locations were randomly determined in Class 3 areas. A square grid sampling was used for Class 2 areas with the starting location for the grid randomly located.

2.9 Instrumentation and Measurement Quality Objectives

The main objectives are to determine appropriate analysis techniques for each radionuclide and ensure Measurement Quality Objectives are satisfied. One should be confident that the measurement results are valid and appropriate for the decisions being made.

2.9.1 Measurement Quality Objectives:

- Detection Capability: Minimum Detection Concentration (MDC) should be below the MARSSIM defined Lower-Bound of the Gray Region (LBGR).
- The degree of measurement uncertainty (combined precision and bias) should be reported and the level should be reasonable relative to the needed accuracy of the decision and accounted for in the statistical analysis.
- Range of the instrument and measurement technique should be appropriate for the concentrations expected.
- The instrument and measurement technique should be specific for the radionuclide(s) being measured. Specificity is the ability of the measurement method to measure the radionuclide of concern in the presence of interferences.
- For field instruments, the instrument should be rugged enough to consistently provide reliable measurements. However, in this case, all samples will be analyzed in the laboratory.

2.9.2 Procedures used to meet these Measurement Quality Objectives:

1) Collection of valid soil sample appropriate for the dose assessment,
    a. Soil sampling will follow the LANL (2012a) procedure SOP-5132 **"Collection of soil and vegetation samples for the environmental surveillance program."** These are surface soil samples appropriate for the deposition pathway and the exposure scenario (i.e., top 5 cm). Subsurface soil samples are not required as depositions would be to surfaces with little migration to deeper soil expected.
    b. Additional quality assurance for the collection of the samples is provided through LANL (2008) procedure QAPP-0001 **"Quality and assurance project plan for the soils, foodstuffs, and non-foodstuff biota monitoring project."**
2) Soil sample analysis will use EPA-approved analytical procedures for each radionuclide. The following will be used by the independent laboratory:
    a. Environmental Measurements Laboratory (EML). **The procedures manual of the Environmental Measurements Laboratory**. Report HASL-300; 1997. Radionuclide specific procedures for the radionuclides of Am-241, Pu-239 and U-238 are provided in EML (EML 1997).
    b. Environmental Protection Agency (EPA). **Method 901.1 - Gamma Emitting Radionuclides in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from NTIS, document no. PB 80-224744.

c. Environmental Protection Agency (EPA). **Method 905.0 - Radioactive Strontium in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, document no. PB 80-224744.
d. Environmental Protection Agency (EPA). **Method 906.0 - Tritium in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, document no. PB 80-224744.

After the measurements are completed, the laboratory results in units equivalent to the ALs will be evaluated with respect to the MQOs, as stated above.

2.10 Statistical Evaluation of the Survey Results

All the applicable data that has passed the MQO evaluation will be used to determine the upper-bound estimate of the mean for soil concentrations (generally, the 95% value) for each radionuclide. The EPA software ProUCL (EPA 2010) will be used to determine this value. The statistical decision as to whether the residual soil contamination levels (i.e., the 95% UCLs) are below the authorized limits will be evaluated using the following criteria. All analyses and results will be documented.

Decision Criteria:

1) When evaluating individual sample results, if all samples are ≤ the recreational or construction worker AL, then no further action is required and the site passes the criteria for the specific use. No further actions are needed.
2) If all individual samples or the UCL are > the recreational or construction worker AL, then the site is not a candidate for release and site remediation is needed, followed by resampling before it can be released.
3) If the UCL is below the AL but some individual measurements are above the AL, then statistical analysis is needed. Generally, non-parametric statistical approaches are used to evaluate the null hypothesis. If contamination is present in background, the Wilcoxon Rank Sum test is suggested, and if contamination is not present in background or very low relative to the AL, use the Sign Test. For Tract C-2, the Sign Test will be used with a $p < 0.05$ decision threshold for significance. See MARSSIM chapter 8 for details and examples.
4) Alternatively, one could confirm that the ratio of the upper-confidence level (UCL) of the average concentration divided by the AL and the sum of hot spot activity ratios do not exceed unity:

   Equation 2

$$\frac{\overline{C}_{UCL}}{C_{AL}} + \sum_{i=1}^{n} \frac{C_{i,C>AL}}{C_{AL} * AF} \leq 1$$

Here $\overline{C}_{UCL}$ is the 95% upper bound estimate of the concentration mean, C_{AL} is the recreational or construction worker AL (15 mrem yr^{-1}), $C_{i,c>AL}$ is the sample concentration for a single sample above the AL (i.e., has elevated measured concentrations), and *AF* is the Area Factor [ratio of effective dose calculated for area of contamination normalized to effective dose calculated for 10,000 m^2 (RESRAD default)]. If the value in Equation 2 is > 1, the site is a candidate for further characterization of the nature and extent of the contamination, remediation of the site, follow up confirmatory sampling, and reanalysis against the decision criteria in this section. Area Factors are dependent on the exposure scenario and should be calculated individually.

5) If there are multiple radionuclides (*i*) being evaluated in a sampling unit, the sum of the ratios should be less than or equal to 1, as shown in Equation 1.
6) The dose assessment based on the soil measurements will include the sum of doses from all radionuclides, and this sum will be compared to the 3 mrem/yr (0.03 mSv/yr) threshold for follow-up ALARA analysis.

3.0 Results of the Analysis for Sampling Number and Locations

The specific details of the analysis using MARSSIM and the results are provided in Attachment 1 of this report (Attachments 2-6 provide only an abridged version of this report for each of the specific decision areas). Results showed that 11 randomly-sited samples were needed within the Class 3 decision area of Tract C-2. The same number of samples are needed for the Class 2 areas; however, Class 2 areas were sampled using a grid pattern to be more sensitive to potential for concentrated areas of contamination. The approximate locations are indicated in Figure 2, as well as in each respective Attachment. Locations were selected using a quasi-random number generator for x and y coordinates (Matzke et al. 2010). The specific statistical parameter values, analysis, results, and approximate coordinates for the randomly selected sampling locations are provided in the summary report (Attachment 1).

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4.1 Historical Records and Other Pertinent Documents

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Compliance Order on Consent (Consent Order) issued pursuant to the New Mexico Hazardous Waste Act (HWA), NMSA 1978, § 74-4-10, and the New Mexico Solid Waste Act (SWA), NMSA 1978, § 74-9-36(D). Entered into by the New Mexico Environment Department, the United States Department of Energy, the Regents of the University of California, and the State of New Mexico Attorney General, Santa Fe, NM, March 1, 2005.

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Attachment 1 – Blue Decision Area North 1 (Class 2 / Construction)

Systematic sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM)

Summary
This report summarizes the sampling design used, associated statistical assumptions, as well as general guidelines for conducting post-sampling data analysis. Sampling plan components presented here include how many sampling locations to choose and where within the sampling area to collect those samples. The type of medium to sample is limited to soil and sediment. Techniques and procedures for sampling are addressed in other sections of the sampling plan.

The following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are provided below the figures.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Type of Sampling Design	Nonparametric
Sample Placement (Location) in the Field	Systematic with a random start location
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Formula for calculating number of sampling locations	Sign Test - MARSSIM version
Calculated total number of samples	11
Number of samples on map [a]	11
Number of selected sample areas [b]	1
Specified sampling area [c]	9679.45 m^2
Size of grid / Area of grid cell [d]	97.3227 feet / 9471.71 ft^2
Grid pattern	Square

[a] This number may differ from the calculated number because of 1) grid edge effects, 2) adding judgment samples, or 3) selecting or unselecting sample areas.
[b] The number of selected sample areas is the number of colored areas on the map of the site. These sample areas contain the locations where samples are collected.
[c] The sampling area is the total surface area of the selected colored sample areas on the map of the site.
[d] Size of grid / Area of grid cell gives the linear and square dimensions of the grid used to systematically place samples.

Area: Class2 North1 (Systematic-UTM Coordinates)		
	X Coordinate (m)	Y Coordinate (m)
1	390325.2979	3970246.7094
2	390325.2979	3970276.3733
3	390354.9619	3970276.3733
4	390532.9456	3970276.3733
5	390562.6095	3970276.3733
6	390592.2735	3970276.3733
7	390354.9619	3970306.0373
8	390384.6258	3970306.0373
9	390414.2898	3970306.0373
10	390443.9537	3970306.0373
11	390473.6177	3970306.0373

Primary Sampling Objective

The primary purpose of sampling at this site is to compare a site median or mean value with a fixed threshold. The working hypothesis (or 'null' hypothesis) is that the median(mean) value at the site is equal to or exceeds the threshold. The alternative hypothesis is that the median(mean) value is less than the threshold. VSP calculates the number of samples required to reject the null hypothesis in favor of the alternative one, given a selected sampling approach and inputs to the associated equation.

Selected Sampling Approach

A nonparametric systematic sampling approach with a random start was used to determine the number of samples and to specify sampling locations. A nonparametric formula was chosen because the conceptual model and historical information (e.g., historical data from this site or a very similar site) indicate that typical parametric assumptions may not be true.

Both parametric and non-parametric equations rely on assumptions about the population. Typically, however, non-parametric equations require fewer assumptions and allow for more uncertainty about the statistical distribution of values at the site. The trade-off is that if the parametric assumptions are valid, the required number of samples is usually less than if a non-parametric equation was used.

Locating the sample points over a systematic grid with a random start ensures spatial coverage of the site. Statistical analyses of systematically collected data are valid if a random start to the grid is used. One disadvantage of systematically collected samples is that spatial variability or patterns may not be discovered if the grid spacing is large relative to the spatial patterns.

Number of Total Samples: Calculation Equation and Inputs

The equation used to calculate the number of samples is based on a Sign test (see PNNL 13450 for discussion). For this site, the null hypothesis is rejected in favor of the alternative one if the median(mean) is sufficiently smaller than the threshold. The number of samples to collect is calculated so that if the inputs to the equation are true, the calculated number of samples will cause the null hypothesis to be rejected.

The formula used to calculate the number of samples is:

$$n = \frac{(Z_{1-\alpha} + Z_{1-\beta})^2}{4(SignP - 0.5)^2} \qquad \text{where} \qquad SignP = \Phi\left(\frac{\Delta}{s_{total}}\right)$$

$\Phi(z)$ is the cumulative standard normal distribution on $(-\infty,z)$ (see PNNL-13450 for details),

n is the number of samples,

S_{total} is the estimated standard deviation of the measured values including analytical error,

Δ is the width of the gray region,

α is the acceptable probability of incorrectly concluding the site median(mean) is less than the threshold,

β is the acceptable probability of incorrectly concluding the site median(mean) exceeds the threshold,

$Z_{1-\alpha}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\alpha}$ is $1-\alpha$,

$Z_{1-\beta}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\beta}$ is $1-\beta$.

Note: MARSSIM suggests that the number of samples should be increased by at least 20% to account for missing or unusable data and uncertainty in the calculated value of n. VSP allows a user-supplied percent overage as discussed in MARSSIM (EPA 2000, p. 5-33).

The values of these inputs that result in the calculated number of sampling locations are:

Analyte	n[a]	Parameter					
		S	Δ	α	β	$Z_{1-\alpha}$ [b]	$Z_{1-\beta}$ [c]
Pu-239	11	2.02 pCi/g	71 pCi/g	0.05	0.1	1.64485	1.28155

[a] The final number of samples has been increased by the MARSSIM Overage of 20%.
[b] This value is automatically calculated by VSP based upon the user defined value of α.
[c] This value is automatically calculated by VSP based upon the user defined value of β.

Statistical Assumptions
The assumptions associated with the formulas for computing the number of samples are:
1. the computed sign test statistic is normally distributed,
2. the variance estimate, S^2, is reasonable and representative of the population being sampled,
3. the population values are not spatially or temporally correlated, and
4. the sampling locations will be selected randomly or systematically with a randomized start.

The first three assumptions will be assessed in a post data collection analysis. The last assumption is valid because the sample locations were selected using a random process.

Sensitivity Analysis
The sensitivity of the calculation of number of samples was explored by varying the standard deviation, lower bound of gray region (% of action level), beta (%), probability of mistakenly concluding that μ > action level and alpha (%), probability of mistakenly concluding that μ < action level. The following table shows the results of this analysis.

Number of Samples							
AL=3200		α=5		α=10		α=15	
		s=0.322	s=0.161	s=0.322	s=0.161	s=0.322	s=0.161
LBGR=90	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6
LBGR=80	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6
LBGR=70	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6

s = Standard Deviation
LBGR = Lower Bound of Gray Region (% of Action Level)
β = Beta (%), Probability of mistakenly concluding that μ > action level
α = Alpha (%), Probability of mistakenly concluding that μ < action level
AL = Action Level (Threshold)

Recommended Data Analysis Activities
Post data collection activities generally follow those outlined in EPA's Guidance for Data Quality Assessment (EPA, 2000). The data analysts will become familiar with the context of the problem and goals for data collection and assessment. The data will be verified and validated before being subjected to statistical or other analyses. Graphical and analytical tools will be used to verify to the extent possible the assumptions of any statistical analyses that are performed as well as to achieve a general understanding of the data. The data will be assessed to determine

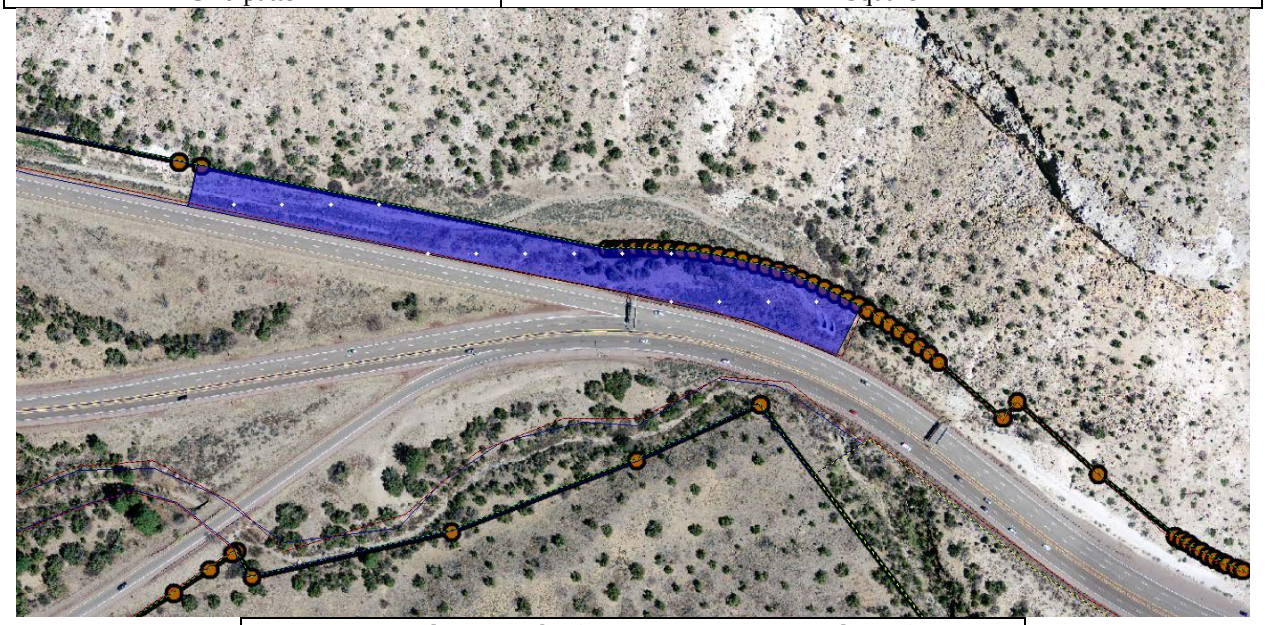
whether they are adequate in both quality and quantity to support the primary objective of sampling.

Because the primary objective for sampling for this site is to compare the site median(mean) value with a threshold value, the data will be assessed in this context. Assuming the data are adequate, at least one statistical test will be done to perform a comparison between the data and the threshold of interest. Results of the exploratory and quantitative assessments of the data will be reported, along with conclusions that may be supported by them.

Attachment 2 – Blue Decision Area North 2 (Class 2 / Construction)

Systematic sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM): the following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Sample Placement (Location) in the Field	Systematic with a random start location
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Calculated total number of samples	11
Number of samples on map	14
Specified sampling area	9409.15 m^2
Size of grid / Area of grid cell	87.2311 feet / 7609.26 ft^2
Grid pattern	Square

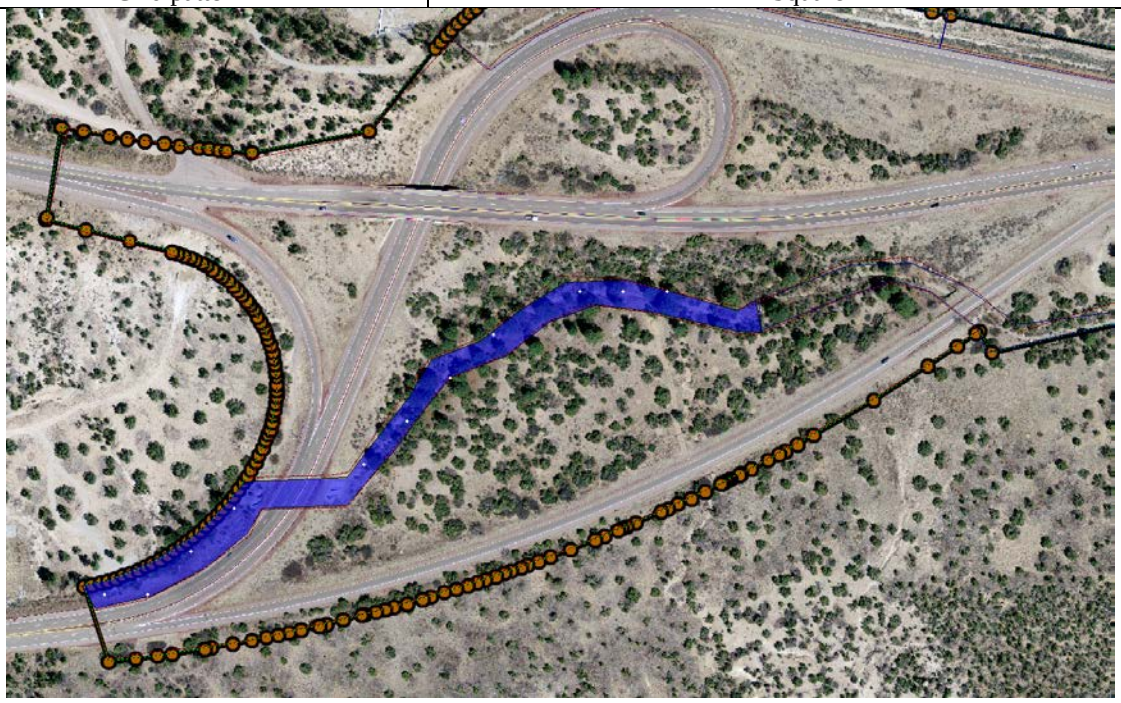


Area: Class2 North2 (Systematic- UTM Coordinates)		
	X Coordinate (m)	Y Coordinate (m)
1	390880.6288	3970201.5129
2	390907.2168	3970201.5129
3	390933.8049	3970201.5129
4	390960.3929	3970201.5129
5	390747.6887	3970228.1009
6	390774.2767	3970228.1009
7	390800.8647	3970228.1009
8	390827.4527	3970228.1009
9	390854.0408	3970228.1009
10	390880.6288	3970228.1009
11	390641.3365	3970254.6889
12	390667.9246	3970254.6889
13	390694.5126	3970254.6889
14	390721.1006	3970254.6889

Attachment 3 – Blu13e Decision Area South 1 (Class 2 / Construction)

Systematic sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM): the following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Sample Placement (Location) in the Field	Systematic with a random start location
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Calculated total number of samples	11
Number of samples on map	11
Specified sampling area	9113.53 m^2
Size of grid / Area of grid cell	94.4348 feet / 8917.93 ft^2
Grid pattern	Square

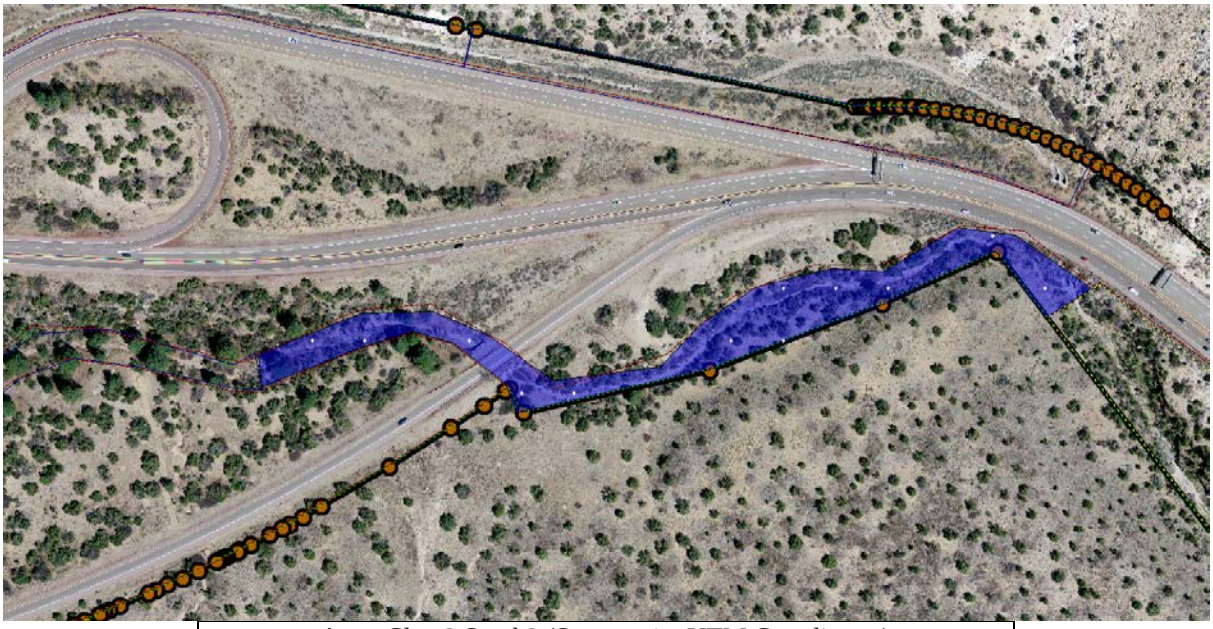


Area: Class2 South1 (Systematic- UTM Coordinates)		
	X Coordinate (m)	Y Coordinate (m)
1	390060.5950	3969890.5052
2	390089.3788	3969890.5052
3	390118.1625	3969919.2889
4	390146.9462	3969948.0726
5	390233.2974	3969976.8564
6	390262.0811	3970005.6401
7	390290.8649	3970034.4238
8	390319.6486	3970063.2075
9	390377.2160	3970091.9913
10	390405.9998	3970091.9913
11	390434.7835	3970091.9913

Attachment 4 – Blue Decision Area South 2 (Class 2 / Construction)

Systematic sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM): the following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Sample Placement (Location) in the Field	Systematic with a random start location
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Calculated total number of samples	11
Number of samples on map	12
Specified sampling area	10364.16 m^2
Size of grid / Area of grid cell	100.706 feet / 10141.7 ft^2
Grid pattern	Square



Area: Class2 South2 (Systematic- UTM Coordinates)		
	X Coordinate (m)	Y Coordinate (m)
1	390650.2449	3970062.9696
2	390680.9401	3970062.9696
3	390527.4640	3970093.6648
4	390558.1593	3970093.6648
5	390619.5497	3970093.6648
6	390773.0258	3970093.6648
7	390803.7210	3970093.6648
8	390803.7210	3970124.3601
9	390834.4162	3970124.3601
10	390865.1114	3970124.3601
11	390957.1971	3970124.3601
12	390926.5019	3970155.0553

Attachment 5 – Red Decision Area (Class 3 / Construction)

Random sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM): the following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below. Locations randomly placed on the road shall be moved to either side of the road for sampling of native soil along the shoulder, and the directions from the road, north or south, was randomly determined and listed in the table below.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Sample Placement (Location) in the Field	Simple random sampling
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Calculated total number of samples	11
Number of samples on the map	11
Specified sampling area	244748.05 m^2

Area: Construction- UTM Coordinates)			
	X Coordinate (m)	Y Coordinate (m)	Type
1	390450.8911	3970153.3199	Random
2	390637.4052	3970251.1431	Random
3	390388.7197	3970022.8891	Random
4	390264.3770	3970218.5354	Random
5	390761.7480	3970120.7122	Random
6	390151.6914	3969899.7044	Random
7	391146.4334	3970046.4391	Random (on road)-north
8	390649.0624	3970193.1738	Random
9	391643.8044	3969948.6160	Random (on road)-south
10	391892.4899	3970013.8314	Random (on road)-north
11	390089.5200	3970160.5661	Random (on road)-north

Attachment 6 – Yellow Decision Area (Class 3 / Recreational)

Random sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM): the following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Sample Placement (Location) in the Field	Simple random sampling
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Calculated total number of samples	11
Number of samples on the map	11
Specified sampling area	135089.00 m^2

Area: Recreational (Random- UTM Coordinates)		
	X Coordinate (m)	Y Coordinate (m)
1	391789.9355	3969918.7638
2	391658.9552	3969833.5909
3	391593.4650	3969890.3728
4	391200.5240	3969932.9593
5	391724.4453	3970060.7186
6	391462.4847	3969847.7864
7	391986.4060	3969975.5457
8	390987.6809	3970103.3050
9	391249.6416	3969904.5683
10	391773.5630	3970032.3276
11	391053.1711	3969989.7412

Appendix B

Sampling and Analysis Plan (SAP) for Assessment of LANL-Derived Residual Radionuclides in Soils within Tract C-3 for Land Transfer Decisions

1.0 Background for C-3[1]

1.1 Site Location

The C-3 tract extends approximately one mile along New Mexico State Road 502 (NM 502) from the intersection with East Gate Drive on the West end to the "White Rock Y" interchange with New Mexico State Road 4 (NM 4) on the East end. This tract contains the NM 502 highway right-of-way as well as utility corridor areas, undeveloped hill slope, and canyon wall on either side of the highway (see Figure 1). The legal property boundary description of this tract is provided by the Army Corps of Engineers Title Report, **"White Rock Y Site at Los Alamos, New Mexico"**, September 15, 1998.

[1] Much of the information in this section is directly from: Rae, K. 2002. Environmental Baseline Survey for C-3, White Rock Y-3 Tract, memo RRES-ECO:03-0004.

Figure 1. Aerial view of the C-3 tract along NM 502 and its spatial relation to East Gate (left) and the White Rock Y interchange (right).

The C-3 tract encompasses approximately 53.6 acres (~ 217,000 m^2). The predominant vegetation is piñon-juniper woodland interspersed with shrubs, grasslands, and wildflowers. Areas adjacent to the tract represent habitat for the Mexican Spotted Owl. Noise and light in the vicinity of this tract are primarily due to motor vehicles traveling along NM 502. Stormwater runs along the road and into culverts which divert the water into the canyon.

1.2 General History

Prior to LANL occupancy, there was little development on the Pajarito Plateau, however the Plateau has been home to Native Americans for thousands of years. Historical maps from the pre-LANL era (1924), an aerial photograph (1935), and historical accounts of life in the area indicate little development until 1917, when the Los Alamos Ranch School for boys was established. In the early 1920s, the Ranch School contracted with Sandoval County to build a road from Los Alamos mesa down to Otowi Crossing at the Rio Grande. Later expansion of this access route formed the road which currently runs through this parcel.

Even after LANL occupancy, this land tract has had very little development and has served instead to buffer Laboratory activities from the surrounding region and to provide the access road to Los Alamos. No structures or facilities associated with LANL's federal, state, or local permits (such as air monitoring stations, radiation monitoring stations, or wastewater discharge outfalls) are located within the tract. The tract was never actively used by LANL, no LANL operations were conducted within the tract boundaries, and no LANL structures were situated within the tract.

1.3 Current Use

Tract C-3 is unoccupied land; current land use at the tract is limited to transportation and construction along NM 502. Adjacent land uses to the north and south include undeveloped lands either being transferred to Los Alamos County or being retained as mission essential for Los Alamos National Laboratory.

1.4 Summary of Historical Evaluation of LANL Impact

There are no Potential Release Sites (PRSs) located on the C-3 tract, no record that hazardous substances were ever stored at this site, and no current requirements for federal cleanup activities.

1.4.1 Adjacent Properties with Known or Suspected Releases

None. The adjacent lands are mostly undeveloped, serving as a right-of way for existing state roadways. No apparent environmental liabilities were identified in any federal or state environmental databases.

1.5 Preliminary Results from Surveys for Residual Contamination

For the purpose of developing a MARSSIM-based sampling plan (MARSSIM 2000), previous Pu-239 data were used to determine an expected standard deviation for sample plan development. The 27 soil surface and sediment samples collected in the vicinity of Tract C-3 (mostly taken in the canyon floodplain) represent sample collection from 1996 through 2014 (data from INTELLUS 2014). These data points had a mean Pu-239 concentration of 1.22 pCi/g and a standard deviation of 2.02 pCi/g (see Table 1). These values compare to a nominal background level for Pu-239 of 0.054 pCi/g (Ryti et al 1998). All preliminary radionuclide concentrations in these historical data were substantially below the SAL for construction worker use (72 pCi/g). Similarly, Cs-137 concentrations in soil and sediment in the vicinity of the C-3 tract were assessed (1.7 ± 1 pCi/g) and were within the range of background (1.6 pCi/g). Thus, the preliminary analysis used the standard deviation for Pu-239. Levels of Cs-137 and other gamma-emitting radionuclides do not justify a scan survey.

Table 1. Raw data used for preliminary analysis and associated summary statistics

Field Sample ID	Date Sampled	Result [pCi/g]	Statistical Analysis: Pu-239 Concentration [pCi/g]	
CALA-07-4175	6/27/2007	0.777		
CALA-07-7023	9/27/2007	0.145	Mean	1.21783
LAWeirUS-07-798	5/16/2007	0.0058	Standard Error	0.38835
LAWeirUS-10-19282	8/19/2010	0.104	Median	0.165
LAWeirUS-10-19283	8/18/2010	0.0841	Mode	2.1
LAWeirUS-11-10832	5/25/2011	0.14	Standard Deviation	2.017924
LAWeirUS-11-10833	5/25/2011	0.212	Sample Variance	4.072018
SFB-12-13930	6/12/2012	0.0025	Range	7.9375
SFB-12-13931	6/12/2012	0.007	Minimum	0.0025
SFB08-08-12072	5/7/2008	0.617	Maximum	7.94

SFB08-08-12073	5/7/2008	0.0054	Sum	32.8814
SFB08-08-12074	5/14/2008	0.0033	Count	27
SFBLAW-13-36099	6/14/2013	0.047	Confidence Level (95.0%)	0.798264
SFBLAW-13-36100	6/14/2013	0.0194		
WIER-14-56713	5/28/2014	0.0553		
WIER-14-56714	5/28/2014	0.0276		
LAWeirUS-09-10497	7/1/2009	0.165		
CAPU-11-2391	12/2/2010	0.382		
04PU-96-0227	9/24/1996	2.1		
CAPU-03-51062	3/18/2003	3.73		
CAPU-03-51061	3/18/2003	2.88		
04PU-97-0048	5/14/1997	7.94		
04PU-97-0047	5/14/1997	4.73		
04PU-96-0227	9/24/1996	2.1		
CAPU-11-2393	12/2/2010	0.662		
04PU-97-0049	5/14/1997	5.22		
CAPU-01-0022	8/6/2001	0.72		

1.6 Conclusions regarding the classification of Tract C-3 relative to potential for residual radioactive contamination

The soil concentrations of Pu-239 and Cs-137 in soil/sediment from the preliminary set of measurements suggest that general levels are likely to be substantially below all SALs for construction use and near background levels. Additionally, the preliminary data set, which was taken from the floodplain, would be expected to be higher than soil from hill slopes within the C-3 tract (LANL 2004). Thus, DOE/NNSA believes no remedial activities are needed on the C-3 tract.

The C-3 tract qualifies as a Class 3 area under MARSSIM [i.e., not expected to contain any residual radioactivity or expected to contain levels that are close to background or at a small fraction of the threshold for intended use (MARSSIM 2000)]. Due to the potential for road work along NM 502, the exposure scenario designation for this tract is construction use, which is appropriate for any area where soil is likely to be disturbed for construction or utility purposes. One decision area is defined for the full C-3 tract. If future use designation changes in these areas, sampling plans for specifically identified exposure scenarios could be considered.

2.0 Data Quality Objectives for the Sampling and Analysis Plan

The sampling and analysis plans (SAPs) for Tract C-3 follows the LANL (2012b) procedure EDA-QP-238, **"Dose assessment data quality objectives for land transfers into the public domain."**

2.1 Objective of the SAP

The objective of this sampling and analysis plan is to confirm, within the stated statistical confidence limits, that the mean levels of potential radioactive residual contamination in soils in C-3 are documented in appropriate units, and are below the 15 mrem/yr (0.15 mSv/y) limit for public construction use. The Screening Action Levels (SALs) for the construction worker scenario are provided in Table 2. SALs, as derived in LANL (2012c), are used by LANL as preapproved Authorization Limits (ALs), as required in DOE Order 458.1 (section 2.k.(6)(f)2 in the contractors Requirements Document), and are identified as ALs in the rest of this SAP with regards to statistical decisions.

Table 2. Background levels and SALs based on an annual dose of 15 mrem (0.15 mSv) (LANL 2012c, Table B-1)

Radionuclide	Background [pCi/g] (Ryti et al 1998)	Construction Worker SAL [pCi/g] 15 mrem/yr (0.15 mSv/yr)
Am-241	0.013	85
Cs-137	1.65	18
Co-60	-	4.1
Tritium (H-3)	0.08	3.7E4
Pu-238	0.023	79
Pu-239	0.054	72
Sr-90	1.31	980
U-234	2.59	460
U-235	0.2	61
U-238	2.29	250

2.2 Decision Identification

The principle study question is: Does the residual radioactive contamination exceed ALs for the respective exposure scenarios in each of the decision areas within C-3? The decision alternatives are:

- If results from the soil radioactive contamination measurements are at or above the AL (collectively), the site is not a candidate for land transfer.
- If results from the soil radioactive contamination measurements are below the AL (collectively), the site is a candidate for land transfer.

2.3 Inputs into the Decision

The assumed near-term future land use and exposure pathway assumes construction use. ALs for all the analyzed radionuclide constituents and the respective SALs are provided in Table 2 and the derivation of the SALs is documented in LANL (2012c). The 15 mrem/yr (0.15 mSv/y) SALs used in this analysis were calculated using RESRAD (RESRAD 2001).

Data to be used in the analysis include surface soil/sediment concentration measurements for radionuclides. The unity (sum of fractions) rule will be applied. The formula used in for the unity rule is:

Equation 1

$$\frac{C_1}{AL_1} + \frac{C_2}{AL_2} + \frac{C_3}{AL_3} \ldots\ldots \frac{C_n}{AL_n} \leq 1$$

where $C_{1\text{-}n}$ and $AL_{1\text{-}n}$ are the upper-bound estimates of the mean concentrations for radionuclides (e.g., upper 95% values) and Authorized Levels 1 through n, respectively.

2.4 Study Boundaries

The study is limited to Tract C-3, as identified in Figure 1. The list of radionuclides in the analysis includes: Am-241, Cs-137, Co-60, H-3, Pu-238, Pu-239, Sr-90, U-234, U-235, and U-238. Individual doses are evaluated out to 1000 years.

2.5 Decision Rule

One decision area was used for the full C-3 tract, as described in Attachment 1. The decision rule is based on the null hypothesis that the mean residual contamination levels in soil and/or sediment in Tract C-3 combined over all radionuclides is above the AL and likely to result in an all-pathway radiation dose to the critical receptor above 15 mrem/yr (0.15 mSv/yr). The alternative hypothesis is that the mean residual contamination levels in soil and/or sediment in Tract C-3 combined over all radionuclides is below the AL and not likely to result in an all-pathway radiation dose to the critical receptor above 15 mrem/yr (0.15 mSv/yr).

2.6 Limits on Decision Errors

The acceptable statistical errors for this analysis are that Type I error (i.e., conclude contamination levels at site are < AL when in fact it is > AL) has a probability of $p < 0.05$; and the Type II error is (i.e., conclude soil contamination level is > AL when in fact it is < AL) has a probability of $p < 0.1$. The distribution for the preliminary data is *not* assumed to be normal.

2.7 Optimization of Design Process

The survey design is optimized by analyzing historical data. Specifically, the lack of evidence of radiological operations within Tract C-3 suggests that the concentrations are expected to be substantially lower than the SALs. Treating the C-3 tract as Class 3 optimizes the number of required sample locations based on construction land use. Sampling areas for the full C-3 tract are included in Figure 2. If land use requirements change in the future, sampling could be targeted to the specific area of the proposed activity.


Figure 2. Map of sampling locations in the decision area for Tract C-3

2.8 Statistically-Based Evaluation for Number of Samples Required using MARSSIM

Google Earth was used to plan sampling in Tract C-3, and a geo-referenced image file with an associated polygon (.shp) for the tract was incorporated into Visual Sampling Plan (VSP) software (Matzke et al. 2010). The sampling area was defined inside the initial polygon (Figure 2). The MARSSIM application within VSP was then used to determine the statistically-based sampling plan. The preliminary sampling data in Table 1 were used to determine the standard deviations needed for calculating the necessary number of samples for each of the identified radionuclides. Because of the Class 3 designation, all sampling locations were randomly determined within the tract.

2.9 Instrumentation and Measurement Quality Objectives

The main objectives are to determine appropriate analysis techniques for each radionuclide and ensure Measurement Quality Objectives are satisfied. One should be confident that the measurement results are valid and appropriate for the decisions being made.

2.9.1 Measurement Quality Objectives:

- Detection Capability: Minimum Detection Concentration (MDC) should be below the MARSSIM defined Lower-Bound of the Gray Region (LBGR).
- The degree of measurement uncertainty (combined precision and bias) should be reported and the level should be reasonable relative to the needed accuracy of the decision and accounted for in the statistical analysis.
- Range of the instrument and measurement technique should be appropriate for the concentrations expected.

- The instrument and measurement technique should be specific for the radionuclide(s) being measured. Specificity is the ability of the measurement method to measure the radionuclide of concern in the presence of interferences.
- For field instruments, the instrument should be rugged enough to consistently provide reliable measurements. However, in this case, all samples will be analyzed in the laboratory.

2.9.2 Procedures used to meet these Measurement Quality Objectives:

1) Collection of valid soil sample appropriate for the dose assessment,
    a. Soil sampling will follow the LANL (2012a) procedure SOP-5132 **"Collection of soil and vegetation samples for the environmental surveillance program."** These are surface soil samples appropriate for the deposition pathway and the exposure scenario (i.e., top 5 cm). Subsurface soil samples are not required as depositions would be to surfaces with little migration to deeper soil expected.
    b. Additional quality assurance for the collection of the samples is provided through LANL (2008) procedure QAPP-0001 **"Quality and assurance project plan for the soils, foodstuffs, and non-foodstuff biota monitoring project."**
2) Soil sample analysis will use EPA-approved analytical procedures for each radionuclide. The following will be used by the independent laboratory:
    a. Environmental Measurements Laboratory (EML). **The procedures manual of the Environmental Measurements Laboratory**. Report HASL-300; 1997. Radionuclide specific procedures for the radionuclides of Am-241, Pu-239 and U-238 are provided in EML (EML 1997).
    b. Environmental Protection Agency (EPA). **Method 901.1 - Gamma Emitting Radionuclides in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from NTIS, document no. PB 80-224744.
    c. Environmental Protection Agency (EPA). **Method 905.0 - Radioactive Strontium in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, document no. PB 80-224744.
    d. Environmental Protection Agency (EPA). **Method 906.0 - Tritium in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, document no. PB 80-224744.

After the measurements are completed, the laboratory results in units equivalent to the ALs will be evaluated with respect to the MQOs, as stated above.

2.10 Statistical Evaluation of the Survey Results

All the applicable data that has passed the MQO evaluation will be used to determine the upper-bound estimate of the mean for soil concentrations (generally, the 95% value) for each radionuclide. The EPA software ProUCL (EPA 2010) will be used to determine this value. The statistical decision as to whether the residual soil contamination levels (i.e., the 95% UCLs) are below the authorized limits will be evaluated using the following criteria. All analyses and results will be documented.

Decision Criteria:

1) When evaluating individual sample results, if all samples are ≤ the construction worker AL, then no further action is required and the site passes the criteria for the specific use. No further actions are needed.
2) If all individual samples or the UCL are > the construction worker AL, then the site is not a candidate for release and site remediation is needed, followed by resampling before it can be released.
3) If the UCL is below the AL but some individual measurements are above the AL, then statistical analysis is needed. Generally, non-parametric statistical approaches are used to evaluate the null hypothesis. If contamination is present in background, the Wilcoxon Rank Sum test is suggested, and if contamination is not present in background or very low relative to the AL, the Sign Test is suggested. For Tract C-3, the Sign Test will be used with a $p < 0.05$ decision threshold for significance. See MARSSIM Chapter 8 for details and examples.
4) Alternatively, one could confirm that the ratio of the upper-confidence level (UCL) of the average concentration divided by the AL and the sum of hot spot activity ratios do not exceed unity:

   Equation 2

$$\frac{\overline{C}_{UCL}}{C_{AL}} + \sum_{i=1}^{n} \frac{C_{i,C>AL}}{C_{AL} * AF} \leq 1$$

   Here $\overline{C}_{UCL}$ is the 95% upper bound estimate of the concentration mean, C_{AL} is the construction worker AL (15 mrem/yr (0.15 mSv/yr)), $C_{i,c>AL}$ is the sample concentration for a single sample above the AL (i.e., has elevated measured concentrations), and *AF* is the Area Factor [ratio of effective dose calculated for area of contamination normalized to effective dose calculated for 10,000 m^2 (RESRAD default)]. If the value in Equation 2 is > 1, the site is a candidate for further characterization of the nature and extent of the contamination, remediation of the site, follow up confirmatory sampling, and reanalysis against the decision criteria in this section. Area Factors are dependent on the exposure scenario and should be calculated individually.
5) If there are multiple radionuclides (*i*) being evaluated in a sampling unit, the sum of the ratios should be less than or equal to 1, as shown in Equation 1.
6) The dose assessment based on the soil measurements will include the sum of doses from all radionuclides, and this sum will be compared to the 3 mrem/yr (0.03 mSv/yr) threshold for follow-up ALARA analysis.

3.0 Results of the Analysis for Sampling Number and Locations

The specific details of the analysis (specific statistical parameter values, analysis, results, and approximate coordinates for the randomly selected sampling locations using MARSSIM) are provided in Attachment 1 of this report. Results showed that 11 randomly-sited samples were needed within the Class 3 decision area of Tract C-3. The approximate locations are indicated in Figure 2, and coordinates are provided in the Attachment. Locations were selected using a quasi-random number generator for x and y coordinates (Matzke et al. 2010).

4.0 References

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Attachment 1 – Tract C-3 Decision Area (Class 3 / Construction)

Random sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM)

Summary
This report summarizes the sampling design used, associated statistical assumptions, as well as general guidelines for conducting post-sampling data analysis. Sampling plan components presented here include how many sampling locations to choose and where within the sampling area to collect those samples. The type of medium to sample (i.e., soil, groundwater, etc.) and how to analyze the samples (in-situ, fixed laboratory, etc.) are addressed in other sections of the sampling plan.

The following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Type of Sampling Design	Nonparametric
Sample Placement (Location) in the Field	Simple random sampling
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Formula for calculating number of sampling locations	Sign Test – MARSSIM version
Calculated total number of samples	11
Number of samples on map[a]	11
Number of selected sample areas [b]	1
Specified sampling area [c]	124,993 m^2

[a] This number may differ from the calculated number because of 1) grid edge effects, 2) adding judgment samples, or 3) selecting or unselecting sample areas.
[b] The number of selected sample areas is the number of colored areas on the map of the site. These sample areas contain the locations where samples are collected.
[c] The sampling area is the total surface area of the selected colored sample areas on the map of the site.

Tract C-3 Class 3 Construction (Simple Random Sampling - UTM Coordinates)		
	X Coordinate (m)	Y Coordinate (m)
1	389274.1305	3970332.1868
2	389401.3254	3970284.1649
3	387790.1910	3970596.4391
4	388023.3815	3970548.4172
5	389040.9400	3970364.3332
6	388362.5677	3970580.4318
7	389973.7020	3970156.2382
8	388659.3556	3970431.0303
9	389623.9163	3970294.9682
10	389242.3318	3970342.9901
11	388818.3491	3970375.0047

Note: some of the coordinates listed in the table above may represent locations on the roadway itself. In this case, samples should be obtained from the closest available surface soil/sediment. There is no expectation to sample the road surface itself.

Primary Sampling Objective

The primary purpose of sampling at this site is to compare a site median or mean value with a fixed threshold. The working hypothesis (or 'null' hypothesis) is that the median (mean) value at the site is equal to or exceeds the threshold. The alternative hypothesis is that the median (mean) value is less than the threshold. VSP calculates the number of samples required to reject the null hypothesis in favor of the alternative one, given a selected sampling approach and inputs to the associated equation.

Selected Sampling Approach

A nonparametric random sampling approach was used to determine the number of samples and to specify sampling locations. A nonparametric formula was chosen because the conceptual

model and historical information (e.g., historical data from this site or a very similar site) indicate that typical parametric assumptions may not be true.

Both parametric and non-parametric equations rely on assumptions about the population. Typically, however, non-parametric equations require fewer assumptions and allow for more uncertainty about the statistical distribution of values at the site. The trade-off is that if the parametric assumptions are valid, the required number of samples is usually less than if a non-parametric equation was used.

Locating the sample points randomly provides data that are separated by many distances, whereas systematic samples are all equidistant apart. Therefore, random sampling provides more information about the spatial structure of the potential contamination than systematic sampling does. As with systematic sampling, random sampling also provides information regarding the mean value, but there is the possibility that areas of the site will not be represented with the same frequency as if uniform grid sampling were performed.

Number of Total Samples: Calculation Equation and Inputs
The equation used to calculate the number of samples is based on a Sign test (see PNNL 13450 for discussion). For this site, the null hypothesis is rejected in favor of the alternative one if the median (mean) is sufficiently smaller than the threshold. The number of samples to collect is calculated so that if the inputs to the equation are true, the calculated number of samples will cause the null hypothesis to be rejected.

The formula used to calculate the number of samples is:

$$n = \frac{(Z_{1-\alpha} + Z_{1-\beta})^2}{4(SignP - 0.5)^2} \qquad \text{where} \qquad SignP = \Phi\left(\frac{\Delta}{s_{total}}\right)$$

$\Phi(z)$ is the cumulative standard normal distribution on $(-\infty,z)$ (see PNNL-13450 for details),
n is the number of samples,
S_{total} is the estimated standard deviation of the measured values including analytical error,
Δ is the width of the gray region,
α is the acceptable probability of incorrectly concluding the site median(mean) is less than the threshold,
β is the acceptable probability of incorrectly concluding the site median(mean) exceeds the threshold,
$Z_{1-\alpha}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\alpha}$ is $1-\alpha$,
$Z_{1-\beta}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\beta}$ is $1-\beta$.

Note: MARSSIM suggests that the number of samples should be increased by at least 20% to account for missing or unusable data and uncertainty in the calculated value of n. VSP allows a user-supplied percent overage as discussed in MARSSIM (EPA 2000, p. 5-33).

The values of these inputs that result in the calculated number of sampling locations are:

Analyte	n[a]	Parameter					
		S	Δ	α	β	$Z_{1-\alpha}$ [b]	$Z_{1-\beta}$ [c]
Pu-239	11	2.02 pCi/g	71 pCi/g	0.05	0.1	1.64485	1.28155

[a] The final number of samples has been increased by the MARSSIM Overage of 20%.
[b] This value is automatically calculated by VSP based upon the user defined value of α.
[c] This value is automatically calculated by VSP based upon the user defined value of β.

Statistical Assumptions
The assumptions associated with the formulas for computing the number of samples are:
1. the computed sign test statistic is normally distributed,
2. the variance estimate, S^2, is reasonable and representative of the population being sampled,
3. the population values are not spatially or temporally correlated, and
4. the sampling locations will be selected randomly or systematically with a randomized start.

The first three assumptions will be assessed in a post data collection analysis. The last assumption is valid because the sample locations were selected using a random process.

Sensitivity Analysis
The sensitivity of the calculation of number of samples was explored by varying the standard deviation, lower bound of gray region (% of action level), beta (%), probability of mistakenly concluding that μ > action level and alpha (%), probability of mistakenly concluding that μ < action level. The following table shows the results of this analysis.

Number of Samples							
AL=3200		α=5		α=10		α=15	
		s=0.322	s=0.161	s=0.322	s=0.161	s=0.322	s=0.161
LBGR=90	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6
LBGR=80	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6
LBGR=70	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6

s = Standard Deviation
LBGR = Lower Bound of Gray Region (% of Action Level)
β = Beta (%), Probability of mistakenly concluding that μ > action level
α = Alpha (%), Probability of mistakenly concluding that μ < action level
AL = Action Level (Threshold)

Recommended Data Analysis Activities
Post data collection activities generally follow those outlined in EPA's Guidance for Data Quality Assessment (EPA, 2000). The data analysts will become familiar with the context of the

problem and goals for data collection and assessment. The data will be verified and validated before being subjected to statistical or other analyses. Graphical and analytical tools will be used to verify to the extent possible the assumptions of any statistical analyses that are performed as well as to achieve a general understanding of the data. The data will be assessed to determine whether they are adequate in both quality and quantity to support the primary objective of sampling.

Because the primary objective for sampling for this site is to compare the site median(mean) value with a threshold value, the data will be assessed in this context. Assuming the data are adequate, at least one statistical test will be done to perform a comparison between the data and the threshold of interest. Results of the exploratory and quantitative assessments of the data will be reported, along with conclusions that may be supported by them.

Appendix C

Sampling and Analysis Plan (SAP) for Assessment of LANL-Derived Residual Radionuclides in Soils within Tract C-4 for Land Transfer Decisions

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1.0 Background for C-4[1]

1.1 Site Location

The C-4 tract extends along New Mexico State Road 4 (NM 4) to the southwest of the intersection between NM 4 and New Mexico State Road 502 (the "White Rock Y" intersection). The parcel follows NM 4 from the White Rock Y to approximately 1000 feet south of its intersection with East Jemez Road. This tract covers an area of approximately 18 acres (~73,000 m^2) including the highway itself, utility corridor areas, and undeveloped hill slope on either side of the highway (see Figure 1). Sandia Canyon crosses the eastern boundary of LANL and the associated drainage passes under NM 4 in this tract. The legal property boundary description of this tract is provided by the Army Corps of Engineers Title Report, **"White Rock Y Site at Los Alamos, New Mexico"**, September 15, 1998.

[1] Much of the information in this section is directly from: Environmental Baseline Survey for C-4, White Rock Y-4 Tract. 11 April 2003. Cross-Cut Guidance on Environmental Guidance for DOE Real Property Transfers.

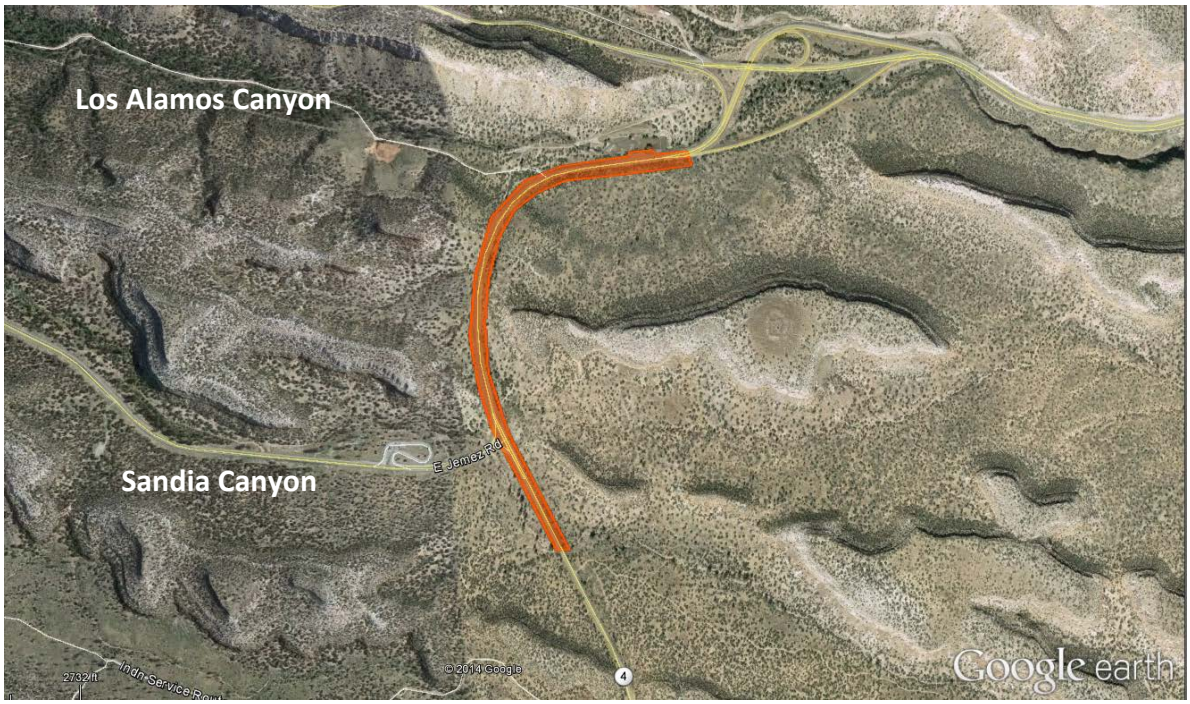

Figure 1. Aerial view of the C-4 tract along NM 4 and its spatial relation to the White Rock Y intersection (North) and East Jemez Road (West)

The predominant vegetation is piñon-juniper woodland interspersed with shrubs, grasslands, and wildflowers. Areas adjacent to the tract represent habitat for the Mexican Spotted Owl. Noise and light in the vicinity of this tract are primarily due to motor vehicles traveling along NM 4. Stormwater runs along the road and into culverts which divert the water into natural drainages.

1.2 General History

Prior to LANL occupancy, there was little development on the Pajarito Plateau, however the Plateau has been home to Native Americans for thousands of years. Historical maps from the pre-LANL era (1924), an aerial photograph (1935), and historical accounts of life in the area indicate little development until 1917, when the Los Alamos Ranch School for boys was established. In the early 1920s, the Ranch School contracted with Sandoval County to build a road from Los Alamos mesa down to Otowi Crossing at the Rio Grande, which ran near this parcel.

Even after LANL occupancy, this land tract has had very little development and has served instead to buffer Laboratory activities from the surrounding region and to provide the access road to Los Alamos. No structures or facilities associated with LANL's federal, state, or local permits (such as air monitoring stations, radiation monitoring stations, or wastewater discharge outfalls) are located within the tract. The tract was never actively used by LANL, no LANL operations were conducted within the tract boundaries, and no LANL structures were situated within the tract.

1.3 Current Use

Tract C-4 is unoccupied land; current land use at the tract is limited to transportation and construction along NM 4. Adjacent land uses include undeveloped lands either being transferred to Los Alamos County or being retained as mission essential for Los Alamos National Laboratory. The New Mexico State Highway and Transportation Department intends to use this parcel only as right-of-way for the existing highway. The land will remain undeveloped.

1.4 Summary of Historical Evaluation of LANL Impact

Because of the drainage associated with Sandia Canyon, Tract C-4 has the potential for contamination from activities conducted at LANL from the late 1940s through the 1980s. Data collected for Sandia Canyon indicate that the levels of contamination in sediments do not present a significant human health or ecological risk and that no remedial action is required. This segment of Sandia Canyon is defined as an Area of Concern (AOC) and is accordingly noted as a Potential Release Site (PRS). However, there is no record that hazardous substances were ever stored at this site, and there are no current requirements for federal cleanup activities.

1.4.1 Adjacent Properties with Known or Suspected Releases

None. The adjacent properties are mostly undeveloped. No apparent environmental liabilities were identified in any federal or state environmental databases.

1.5 Preliminary Results from Surveys for Residual Contamination

For the purpose of developing a MARSSIM-based sampling plan (MARSSIM 2000), previous Pu-239 data were used to determine an expected standard deviation for sample plan development. The 27 soil surface and sediment samples collected in the vicinity of Tract C-4 (mostly taken in the canyon floodplain) represent sample collection from 1996 through 2014 (data from INTELLUS 2014). These data points had a mean Pu-239 concentration of 1.22 pCi/g and a standard deviation of 2.02 pCi/g (see Table 1). These values compare to a nominal background level for Pu-239 of 0.054 pCi/g (Ryti et al 1998). All preliminary radionuclide concentrations in these historical data were substantially below the SAL for construction worker use (72 pCi/g). Similarly, Cs-137 concentrations in soil and sediment in the vicinity of the C-3 tract were assessed (1.7 ± 1 pCi/g) and were within the range of background (1.6 pCi/g). Thus, the preliminary analysis used the standard deviation for Pu-239. Levels of Cs-137 and other gamma-emitting radionuclides do not justify a scan survey.

Table 1. Raw data used for preliminary analysis and associated summary statistics

Field Sample ID	Date Sampled	Result [pCi/g]	Statistical Analysis: Pu-239 Concentration [pCi/g]	
CALA-07-4175	6/27/2007	0.777		
CALA-07-7023	9/27/2007	0.145	Mean	1.21783
LAWeirUS-07-798	5/16/2007	0.0058	Standard Error	0.38835
LAWeirUS-10-19282	8/19/2010	0.104	Median	0.165
LAWeirUS-10-19283	8/18/2010	0.0841	Mode	2.1

LAWeirUS-11-10832	5/25/2011	0.14	Standard Deviation	2.017924
LAWeirUS-11-10833	5/25/2011	0.212	Sample Variance	4.072018
SFB-12-13930	6/12/2012	0.0025	Range	7.9375
SFB-12-13931	6/12/2012	0.007	Minimum	0.0025
SFB08-08-12072	5/7/2008	0.617	Maximum	7.94
SFB08-08-12073	5/7/2008	0.0054	Sum	32.8814
SFB08-08-12074	5/14/2008	0.0033	Count	27
SFBLAW-13-36099	6/14/2013	0.047	Confidence Level (95.0%)	0.798264
SFBLAW-13-36100	6/14/2013	0.0194		
WIER-14-56713	5/28/2014	0.0553		
WIER-14-56714	5/28/2014	0.0276		
LAWeirUS-09-10497	7/1/2009	0.165		
CAPU-11-2391	12/2/2010	0.382		
04PU-96-0227	9/24/1996	2.1		
CAPU-03-51062	3/18/2003	3.73		
CAPU-03-51061	3/18/2003	2.88		
04PU-97-0048	5/14/1997	7.94		
04PU-97-0047	5/14/1997	4.73		
04PU-96-0227	9/24/1996	2.1		
CAPU-11-2393	12/2/2010	0.662		
04PU-97-0049	5/14/1997	5.22		
CAPU-01-0022	8/6/2001	0.72		

1.6 Conclusions regarding the classification of Tract C-4 relative to potential for residual radioactive contamination

The soil concentrations of Pu-239 and Cs-137 in soil/sediment from the preliminary set of measurements suggest that general levels are likely to be substantially below all SALs for construction use and near background levels. Thus, DOE/NNSA believes no remedial activities are needed on the C-4 tract.

The C-4 tract qualifies as a Class 3 area under MARSSIM [i.e., not expected to contain any residual radioactivity or expected to contain levels that are close to background or at a small fraction of the threshold for intended use (MARSSIM 2000)]. Due to the potential for road work along NM 4, the exposure scenario designation for this tract is construction use, which is appropriate for any area where soil is likely to be disturbed for construction or utility purposes. One decision area is defined for the full C-4 tract. If future use designation changes in these areas, sampling plans for specifically identified exposure scenarios could be considered.

2.0 Data Quality Objectives for the Sampling and Analysis Plan

The sampling and analysis plans (SAPs) for Tract C-4 follows the LANL (2012b) procedure EDA-QP-238, **"Dose assessment data quality objectives for land transfers into the public domain."**

2.1 Objective of the SAP

The objective of this sampling and analysis plan is to confirm, within the stated statistical confidence limits, that the mean levels of potential radioactive residual contamination in soils in C-4 are documented in appropriate units, and are below the 15 mrem/yr (0.15 mSv/y) limit for public construction use. The Screening Action Levels (SALs) for the construction worker scenario are provided in Table 2. SALs, as derived in LANL (2012c), are used by LANL as preapproved Authorization Limits (ALs), as required in DOE Order 458.1 (section 2.k.(6)(f)2 in the contractors Requirements Document), and are identified as ALs in the rest of this SAP with regards to statistical decisions.

Table 2. Background levels and SALs based on an annual dose of 15 mrem (0.15 mSv) (LANL 2012c, Table B-1)

Radionuclide	Background [pCi/g] (Ryti et al 1998)	Construction Worker SAL [pCi/g] 15 mrem/yr (0.15 mSv/yr)
Am-241	0.013	85
Cs-137	1.65	18
Co-60	-	4.1
Tritium (H-3)	0.08	3.7E4
Pu-238	0.023	79
Pu-239	0.054	72
Sr-90	1.31	980
U-234	2.59	460
U-235	0.2	61
U-238	2.29	250

2.2 Decision Identification

The principle study question is: Does the residual radioactive contamination exceed ALs for the respective exposure scenarios in each of the decision areas within C-4? The decision alternatives are:

- If results from the soil radioactive contamination measurements are at or above the AL (collectively), the site is not a candidate for land transfer.
- If results from the soil radioactive contamination measurements are below the AL (collectively), the site is a candidate for land transfer.

2.3 Inputs into the Decision

The assumed near-term future land use and exposure pathway assumes construction use. ALs for all the analyzed radionuclide constituents and the respective SALs are provided in Table 2 and the derivation of the SALs is documented in LANL (2012c). The 15 mrem/yr (0.15 mSv/y) SALs used in this analysis were calculated using RESRAD (RESRAD 2001).

Data to be used in the analysis include surface soil/sediment concentration measurements for radionuclides. The unity (sum of fractions) rule will be applied. The formula used in for the unity rule is:

Equation 1

$$\frac{C_1}{AL_1} + \frac{C_2}{AL_2} + \frac{C_3}{AL_3} \ldots\ldots \frac{C_n}{AL_n} \leq 1$$

where $C_{1\text{-}n}$ and $AL_{1\text{-}n}$ are the upper-bound estimates of the mean concentrations for radionuclides (e.g., upper 95% values) and Authorized Levels 1 through n, respectively.

2.4 Study Boundaries

The study is limited to Tract C-4, as identified in Figure 1. The list of radionuclides in the analysis includes: Am-241, Cs-137, Co-60, H-3, Pu-238, Pu-239, Sr-90, U-234, U-235, and U-238. Individual doses are evaluated out to 1000 years.

2.5 Decision Rule

One decision area was used for the full C-4 tract, as described in Attachment 1. The decision rule is based on the null hypothesis that the mean residual contamination levels in soil and/or sediment in Tract C-4 combined over all radionuclides is above the AL and likely to result in an all-pathway radiation dose to the critical receptor above 15 mrem/yr (0.15 mSv/yr). The alternative hypothesis is that the mean residual contamination levels in soil and/or sediment in Tract C-4 combined over all radionuclides is below the AL and not likely to result in an all-pathway radiation dose to the critical receptor above 15 mrem/yr (0.15 mSv/yr).

2.6 Limits on Decision Errors

The acceptable statistical errors for this analysis are that Type I error (i.e., conclude contamination levels at site are < AL when in fact it is > AL) has a probability of $p < 0.05$; and the Type II error is (i.e., conclude soil contamination level is > AL when in fact it is < AL) has a probability of $p < 0.1$. The distribution for the preliminary data is *not* assumed to be normal.

2.7 Optimization of Design Process

The survey design is optimized by analyzing historical data. Specifically, the lack of evidence of radiological operations within Tract C-4 suggests that the concentrations are expected to be substantially lower than the SALs. Treating the C-4 tract as Class 3 optimizes the number of required sample locations based on construction land use. Sampling areas for the full C-4 tract are included in Figure 2 . If land use requirements change in the future, sampling could be targeted to the specific area of the proposed activity.


Figure 2. Map of sampling locations in the decision area for Tract C-4

2.8 Statistically-Based Evaluation for Number of Samples Required using MARSSIM

Google Earth was used to plan sampling in Tract C-4, and a geo-referenced image file with an associated polygon (.shp) for the tract was incorporated into Visual Sampling Plan (VSP) software (Matzke et al. 2010). The sampling area was defined inside the initial polygon (Figure 2). The MARSSIM application within VSP was then used to determine the statistically-based sampling plan. The preliminary sampling data in Table 1 were used to determine the standard deviations needed for calculating the necessary number of samples for each of the identified radionuclides. Because of the Class 3 designation, all sampling locations were randomly determined the tract.

2.9 Instrumentation and Measurement Quality Objectives

The main objectives are to determine appropriate analysis techniques for each radionuclide and ensure Measurement Quality Objectives are satisfied. One should be confident that the measurement results are valid and appropriate for the decisions being made.

2.9.1 Measurement Quality Objectives:

- Detection Capability: Minimum Detection Concentration (MDC) should be below the MARSSIM defined Lower-Bound of the Gray Region (LBGR).
- The degree of measurement uncertainty (combined precision and bias) should be reported and the level should be reasonable relative to the needed accuracy of the decision and accounted for in the statistical analysis.

- Range of the instrument and measurement technique should be appropriate for the concentrations expected.
- The instrument and measurement technique should be specific for the radionuclide(s) being measured. Specificity is the ability of the measurement method to measure the radionuclide of concern in the presence of interferences.
- For field instruments, the instrument should be rugged enough to consistently provide reliable measurements. However, in this case, all samples will be analyzed in the laboratory.

2.9.2 Procedures used to meet these Measurement Quality Objectives:

1) Collection of valid soil sample appropriate for the dose assessment,
    a. Soil sampling will follow the LANL (2012a) procedure SOP-5132 **"Collection of soil and vegetation samples for the environmental surveillance program."** These are surface soil samples appropriate for the deposition pathway and the exposure scenario (i.e., top 5 cm). Subsurface soil samples are not required as depositions would be to surfaces with little migration to deeper soil expected.
    b. Additional quality assurance for the collection of the samples is provided through LANL (2008) procedure QAPP-0001 **"Quality and assurance project plan for the soils, foodstuffs, and non-foodstuff biota monitoring project."**
2) Soil sample analysis will use EPA-approved analytical procedures for each radionuclide. The following will be used by the independent laboratory:
    a. Environmental Measurements Laboratory (EML). **The procedures manual of the Environmental Measurements Laboratory**. Report HASL-300; 1997. Radionuclide specific procedures for the radionuclides of Am-241, Pu-239 and U-238 are provided in EML (EML 1997).
    b. Environmental Protection Agency (EPA). **Method 901.1 - Gamma Emitting Radionuclides in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from NTIS, document no. PB 80-224744.
    c. Environmental Protection Agency (EPA). **Method 905.0 - Radioactive Strontium in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, document no. PB 80-224744.
    d. Environmental Protection Agency (EPA). **Method 906.0 - Tritium in Drinking Water***: Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, EPA 600/4-80-032, prepared by EPA's Environmental Monitoring and Support Laboratory, August 1980 (EPA 1980). Available from U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, document no. PB 80-224744.

After the measurements are completed, the laboratory results in units equivalent to the ALs will be evaluated with respect to the MQOs, as stated above.

2.10 Statistical Evaluation of the Survey Results

All the applicable data that has passed the MQO evaluation will be used to determine the upper-bound estimate of the mean for soil concentrations (generally, the 95% value) for each radionuclide. The EPA software ProUCL (EPA 2010) will be used to determine this value. The statistical decision as to whether the residual soil contamination levels (i.e., the 95% UCLs) are below the authorized limits will be evaluated using the following criteria. All analyses and results will be documented.

Decision Criteria:

1) When evaluating individual sample results, if all samples are ≤ the construction worker AL, then no further action is required and the site passes the criteria for the specific use. No further actions are needed.
2) If all individual samples or the UCL are > the construction worker AL, then the site is not a candidate for release and site remediation is needed, followed by resampling before it can be released.
3) If the UCL is below the AL but some individual measurements are above the AL, then statistical analysis is needed. Generally, non-parametric statistical approaches are used to evaluate the null hypothesis. If contamination is present in background, the Wilcoxon Rank Sum test is suggested, and if contamination is not present in background or very low relative to the AL, the Sign Test is suggested. For Tract C-4, the Sign Test will be used with a $p < 0.05$ decision threshold for significance. See MARSSIM Chapter 8 for details and examples.
4) Alternatively, one could confirm that the ratio of the upper-confidence level (UCL) of the average concentration divided by the AL and the sum of hot spot activity ratios do not exceed unity:

Equation 2

$$\frac{\overline{C}_{UCL}}{C_{AL}} + \sum_{i=1}^{n} \frac{C_{i,C>AL}}{C_{AL} * AF} \leq 1$$

Here $\overline{C}_{UCL}$ is the 95% upper bound estimate of the concentration mean, C_{AL} is the recreational or construction worker AL (15 mrem/yr (0.15 mSv/yr)), $C_{i,c>AL}$ is the sample concentration for a single sample above the AL (i.e., has elevated measured concentrations), and *AF* is the Area Factor [ratio of effective dose calculated for area of contamination normalized to effective dose calculated for 10,000 m^2 (RESRAD default)]. If the value in Equation 2 is > 1, the site is a candidate for further characterization of the nature and extent of the contamination, remediation of the site, follow up confirmatory sampling, and reanalysis against the decision criteria in this section. Area Factors are dependent on the exposure scenario and should be calculated individually.
5) If there are multiple radionuclides (*i*) being evaluated in a sampling unit, the sum of the ratios should be less than or equal to 1, as shown in Equation 1.

6) The dose assessment based on the soil measurements will include the sum of doses from all radionuclides, and this sum will be compared to the 3 mrem/yr (0.03 mSv/yr) threshold for follow-up ALARA analysis.

3.0 Results of the Analysis for Sampling Number and Locations

The specific details of the analysis (specific statistical parameter values, analysis, results, and approximate coordinates for the randomly selected sampling locations using MARSSIM) are provided in Attachment 1 of this report. Results showed that 11 randomly-sited samples were needed within the Class 3 decision area of Tract C-4. The approximate locations are indicated in Figure 2, and coordinates are provided in the Attachment. Locations were selected using a quasi-random number generator for x and y coordinates (Matzke et al. 2010).

4.0 References

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Attachment 1 – Tract C-4 Decision Area (Class 3 / Construction)

Random sampling locations for comparing a median with a fixed threshold (nonparametric - MARSSIM)

Summary
This report summarizes the sampling design used, associated statistical assumptions, as well as general guidelines for conducting post-sampling data analysis. Sampling plan components presented here include how many sampling locations to choose and where within the sampling area to collect those samples. The type of medium to sample (i.e., soil, groundwater, etc.) and how to analyze the samples (in-situ, fixed laboratory, etc.) are addressed in other sections of the sampling plan.

The following table summarizes the sampling design developed. A figure that shows sampling locations in the field and a table that lists sampling location coordinates are also provided below.

SUMMARY OF SAMPLING DESIGN	
Primary Objective of Design	Compare a site mean or median to a fixed threshold
Type of Sampling Design	Nonparametric
Sample Placement (Location) in the Field	Simple random sampling
Working (Null) Hypothesis	The median(mean) value at the site exceeds the threshold
Formula for calculating number of sampling locations	Sign Test – MARSSIM version
Calculated total number of samples	11
Number of samples on map[a]	11
Number of selected sample areas [b]	1
Specified sampling area [c]	73,791 m^2

[a] This number may differ from the calculated number because of 1) grid edge effects, 2) adding judgment samples, or 3) selecting or unselecting sample areas.
[b] The number of selected sample areas is the number of colored areas on the map of the site. These sample areas contain the locations where samples are collected.
[c] The sampling area is the total surface area of the selected colored sample areas on the map of the site.

Tract C-4 Class 3 Construction (Simple Random Sampling -UTM Coordinates)		
	X Coordinate (m)	Y Coordinate (m)
1	389431.1054	3969016.3035
2	389660.1915	3968628.3229
3	389545.6484	3968817.0702
4	389458.3776	3969666.4330
5	389611.1016	3968691.2387
6	389949.2762	3969870.9092
7	389403.8333	3969226.0227
8	389883.8230	3969839.4514
9	389455.6504	3969037.2754
10	389586.5567	3968775.1264
11	389521.1035	3968869.5000

Note: some of the coordinates listed in the table above may represent locations on the roadway itself. In this case, samples should be obtained from the closest available surface soil/sediment. There is no expectation to sample the road surface itself.

Primary Sampling Objective

The primary purpose of sampling at this site is to compare a site median or mean value with a fixed threshold. The working hypothesis (or 'null' hypothesis) is that the median (mean) value at the site is equal to or exceeds the threshold. The alternative hypothesis is that the median (mean) value is less than the threshold. VSP calculates the number of samples required to reject the null hypothesis in favor of the alternative one, given a selected sampling approach and inputs to the associated equation.

Selected Sampling Approach

A nonparametric random sampling approach was used to determine the number of samples and to specify sampling locations. A nonparametric formula was chosen because the conceptual

model and historical information (e.g., historical data from this site or a very similar site) indicate that typical parametric assumptions may not be true.

Both parametric and non-parametric equations rely on assumptions about the population. Typically, however, non-parametric equations require fewer assumptions and allow for more uncertainty about the statistical distribution of values at the site. The trade-off is that if the parametric assumptions are valid, the required number of samples is usually less than if a non-parametric equation was used.

Locating the sample points randomly provides data that are separated by many distances, whereas systematic samples are all equidistant apart. Therefore, random sampling provides more information about the spatial structure of the potential contamination than systematic sampling does. As with systematic sampling, random sampling also provides information regarding the mean value, but there is the possibility that areas of the site will not be represented with the same frequency as if uniform grid sampling were performed.

Number of Total Samples: Calculation Equation and Inputs
The equation used to calculate the number of samples is based on a Sign test (see PNNL 13450 for discussion). For this site, the null hypothesis is rejected in favor of the alternative one if the median (mean) is sufficiently smaller than the threshold. The number of samples to collect is calculated so that if the inputs to the equation are true, the calculated number of samples will cause the null hypothesis to be rejected.

The formula used to calculate the number of samples is:

$$n = \frac{(Z_{1-\alpha} + Z_{1-\beta})^2}{4(SignP - 0.5)^2} \qquad \text{where} \qquad SignP = \Phi\left(\frac{\Delta}{s_{total}}\right)$$

$\Phi(z)$ is the cumulative standard normal distribution on $(-\infty,z)$ (see PNNL-13450 for details),
n is the number of samples,
S_{total} is the estimated standard deviation of the measured values including analytical error,
Δ is the width of the gray region,
α is the acceptable probability of incorrectly concluding the site median(mean) is less than the threshold,
β is the acceptable probability of incorrectly concluding the site median(mean) exceeds the threshold,
$Z_{1-\alpha}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\alpha}$ is $1-\alpha$,
$Z_{1-\beta}$ is the value of the standard normal distribution such that the proportion of the distribution less than $Z_{1-\beta}$ is $1-\beta$.

Note: MARSSIM suggests that the number of samples should be increased by at least 20% to account for missing or unusable data and uncertainty in the calculated value of n. VSP allows a user-supplied percent overage as discussed in MARSSIM (EPA 2000, p. 5-33).

The values of these inputs that result in the calculated number of sampling locations are:

Analyte	n[a]	Parameter					
		S	Δ	α	β	$Z_{1-\alpha}$ [b]	$Z_{1-\beta}$ [c]
Pu-239	11	2.02 pCi/g	71 pCi/g	0.05	0.1	1.64485	1.28155

[a] The final number of samples has been increased by the MARSSIM Overage of 20%.
[b] This value is automatically calculated by VSP based upon the user defined value of α.
[c] This value is automatically calculated by VSP based upon the user defined value of β.

Statistical Assumptions
The assumptions associated with the formulas for computing the number of samples are:
1. the computed sign test statistic is normally distributed,
2. the variance estimate, S^2, is reasonable and representative of the population being sampled,
3. the population values are not spatially or temporally correlated, and
4. the sampling locations will be selected randomly or systematically with a randomized start.

The first three assumptions will be assessed in a post data collection analysis. The last assumption is valid because the sample locations were selected using a random process.

Sensitivity Analysis
The sensitivity of the calculation of number of samples was explored by varying the standard deviation, lower bound of gray region (% of action level), beta (%), probability of mistakenly concluding that μ > action level and alpha (%), probability of mistakenly concluding that μ < action level. The following table shows the results of this analysis.

Number of Samples							
AL=3200		α=5		α=10		α=15	
		s=0.322	s=0.161	s=0.322	s=0.161	s=0.322	s=0.161
LBGR=90	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6
LBGR=80	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6
LBGR=70	β=5	14	14	11	11	10	10
	β=10	11	11	9	9	8	8
	β=15	10	10	8	8	6	6

s = Standard Deviation
LBGR = Lower Bound of Gray Region (% of Action Level)
β = Beta (%), Probability of mistakenly concluding that μ > action level
α = Alpha (%), Probability of mistakenly concluding that μ < action level
AL = Action Level (Threshold)

Recommended Data Analysis Activities
Post data collection activities generally follow those outlined in EPA's Guidance for Data Quality Assessment (EPA, 2000). The data analysts will become familiar with the context of the

problem and goals for data collection and assessment. The data will be verified and validated before being subjected to statistical or other analyses. Graphical and analytical tools will be used to verify to the extent possible the assumptions of any statistical analyses that are performed as well as to achieve a general understanding of the data. The data will be assessed to determine whether they are adequate in both quality and quantity to support the primary objective of sampling.

Because the primary objective for sampling for this site is to compare the site median(mean) value with a threshold value, the data will be assessed in this context. Assuming the data are adequate, at least one statistical test will be done to perform a comparison between the data and the threshold of interest. Results of the exploratory and quantitative assessments of the data will be reported, along with conclusions that may be supported by them.

Appendix D

Summary data and statistics for soil/sediment measurements in each sampling unit and calculated dose based on SALs

C-2 North 1 (Class II Construction)

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	11	11	8	11	11	11	11	11	11	11	11
Average	0.055	0.013	0.096	0.114	0.286	0.008	0.979	0.012	1.038	0.055	1.088
Max	0.195	0.047	0.134	0.280	2.880	0.027	2.600	0.115	1.420	0.083	1.600
Median	0.041	0.016	0.097	0.087	0.026	0.005	0.802	0.053	1.060	0.061	1.160
STD	0.053	0.018	0.026	0.089	0.869	0.009	0.775	0.116	0.340	0.025	0.343
UCL (ProUCL 5.0)	0.084	0.023	0.114	0.163	1.428	0.013	1.403	0.075	1.224	0.069	1.275
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250
UCL Dose Estimate											
mrem/y	0.015	0.083	0.222	0.136	0.001	0.002	0.292	0.001	0.040	0.017	0.077
µSv/y	0.15	0.83	2.22	1.36	0.01	0.02	2.92	0.01	0.40	0.17	0.77

Sum

0.9 mrem/y

8.9 µSv/y

C-2 North 2 (Class II Construction)

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	14	14	13	14	14	14	14	14	14	14	14
Average	0.036	-0.001	0.087	0.091	0.002	0.004	0.801	0.032	1.198	0.072	1.210
Max	0.130	0.044	0.165	0.264	0.148	0.015	3.730	0.281	1.600	0.106	1.650
Median	0.025	-0.008	0.088	0.073	0.042	0.004	0.487	-0.028	1.170	0.071	1.205
STD	0.041	0.023	0.039	0.098	0.224	0.006	0.988	0.151	0.287	0.025	0.266
UCL (ProUCL 5.0)	0.0557	0.0105	0.106	0.137	0.263	0.00684	1.269	0.103	1.334	0.0834	1.336
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250
UCL Dose Estimate											
mrem/y	0.010	0.038	0.206	0.114	0.000	0.001	0.264	0.002	0.044	0.021	0.080
µSv/y	0.10	0.38	2.06	1.14	0.00	0.01	2.64	0.02	0.44	0.21	0.80

Sum

0.8 mrem/y

7.8 µSv/y

C-2 South 1 (Class II Construction)

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	11	11	6	11	11	11	11	11	11	11	11
Average	0.173	-0.018	0.096	0.832	0.067	0.025	0.230	0.191	1.452	0.072	1.441
Max	0.505	0.019	0.120	2.050	0.174	0.085	0.595	1.240	1.750	0.096	1.790
Median	0.146	-0.014	0.089	0.686	0.079	0.014	0.223	0.063	1.450	0.084	1.390
STD	0.150	0.022	0.019	0.612	0.093	0.027	0.169	0.383	0.198	0.025	0.181
UCL (ProUCL 5.0)	0.255	-0.00688	0.111	1.166	0.119	0.0401	0.332	0.694	1.56	0.0859	1.54
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250
UCL Dose Estimate											
mrem/y	0.045	-0.025	0.216	0.972	0.000	0.008	0.069	0.011	0.051	0.021	0.092
µSv/y	0.45	-0.25	2.16	9.72	0.00	0.08	0.69	0.11	0.51	0.21	0.92

Sum

1.5 mrem/y

14.6 µSv/y

C-2 South 2 (Class II Construction)

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	12	12	4	12	12	12	12	12	12	12	12
Average	0.143	0.004	0.117	1.944	0.081	0.009	0.310	0.220	1.277	0.073	1.261
Max	0.690	0.044	0.128	13.400	0.387	0.040	1.010	1.460	1.490	0.109	1.710
Median	0.019	0.004	0.117	0.440	0.032	0.003	0.124	0.086	1.280	0.075	1.240
STD	0.227	0.028	0.013	3.777	0.110	0.014	0.353	0.420	0.151	0.021	0.175
UCL (ProUCL 5.0)	0.428	0.0185	0.132	5.514	0.22	0.027	0.748	0.749	1.335	0.0843	1.352
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250
UCL Dose Estimate											
mrem/y	0.076	0.068	0.257	4.595	0.000	0.005	0.156	0.011	0.044	0.021	0.081
µSv/y	0.76	0.68	2.57	45.95	0.00	0.05	1.56	0.11	0.44	0.21	0.81

Sum

5.3 **mrem/y**

53.1 **µSv/y**

Notably elevated value contributing to elevated UCL and elevated dose for this decision unit

Background-Subtracted UCL Dose Estimate

mrem/y	0.073	0.068	0.257	3.220	0.000	0.001	0.145	-0.009	-0.041	-0.028	-0.056
µSv/y	0.73	0.68	2.57	32.20	0.00	0.01	1.45	-0.09	-0.41	-0.28	-0.56

Background Subtracted Sum

3.6 **mrem/y**

36.3 **µSv/y**

Background Subtracted (Positive Only)

3.8 **mrem/y**

37.6 **µSv/y**

C-2 Class III Construction

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	11	11	9	11	11	11	11	11	11	11	11
Average	0.013	0.006	0.067	0.097	0.031	0.001	0.171	0.061	1.426	0.097	1.390
Max	0.099	0.023	0.091	0.227	0.583	0.009	1.690	0.207	2.150	0.206	2.070
Median	0.005	0.010	0.064	0.104	0.041	0.001	0.018	0.076	1.320	0.098	1.340
STD	0.029	0.015	0.014	0.077	0.316	0.006	0.504	0.097	0.352	0.043	0.322
UCL (ProUCL 5.0)	0.0508	0.0144	0.0754	0.139	0.446	0.00382	1.683	0.114	1.619	0.13	1.566
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250
UCL Dose Estimate											
mrem/y	0.009	0.053	0.147	0.116	0.000	0.001	0.351	0.002	0.053	0.032	0.094
µSv/y	0.09	0.53	1.47	1.16	0.00	0.01	3.51	0.02	0.53	0.32	0.94

Sum

0.9 mrem/y

8.6 µSv/y

C-2 Class III Recreation

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	11	11	10	11	11	11	11	11	11	11	11
Average	0.016	0.010	0.076	0.268	0.227	0.007	0.061	0.058	1.323	0.072	1.429
Max	0.063	0.037	0.106	0.543	1.780	0.027	0.448	0.291	1.870	0.145	2.110
Median	0.013	0.010	0.074	0.283	0.039	0.007	0.020	0.082	1.280	0.082	1.300
STD	0.017	0.020	0.016	0.132	0.522	0.009	0.129	0.109	0.352	0.037	0.414
UCL (ProUCL 5.0)	0.0386	0.0211	0.0853	0.34	1.793	0.0117	0.231	0.117	1.515	0.0926	1.655
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Recreational)	890	46	87	210	430000	850	770	3200	2300	570	1700
UCL Dose Estimate											
mrem/y	0.001	0.007	0.015	0.024	0.000	0.000	0.005	0.001	0.010	0.002	0.015
µSv/y	0.01	0.07	0.15	0.24	0.00	0.00	0.05	0.01	0.10	0.02	0.15

Sum

0.1 mrem/y

0.8 µSv/y

C-3 (Class III Construction)

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	11	11	7	11	11	11	11	11	11	11	11
Average	0.010	0.009	0.093	0.215	0.214	0.000	0.021	0.037	1.541	0.087	1.551
Max	0.031	0.076	0.136	0.750	1.990	0.008	0.066	0.190	2.310	0.158	2.410
Median	0.010	0.018	0.091	0.181	0.059	0.000	0.016	0.042	1.810	0.081	1.660
STD	0.010	0.044	0.029	0.191	0.653	0.005	0.021	0.069	0.455	0.045	0.445
UCL (ProUCL 5.0)	0.016	0.0331	0.114	0.36	1.073	0.00218	0.0439	0.0745	1.789	0.111	1.795
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250
UCL Dose Estimate											
mrem/y	0.003	0.121	0.222	0.300	0.000	0.000	0.009	0.001	0.058	0.027	0.108
µSv/y	0.03	1.21	2.22	3.00	0.00	0.00	0.09	0.01	0.58	0.27	1.08

Sum

0.9 mrem/y

8.5 µSv/y

C-4 (Class III Construction)

Soil Concentrations by Radionuclide (pCi/g)

	Am-241	Co-60	Cs-134	Cs-137	H-3	Pu-238	Pu-239/240	Sr-90	U-234	U-235/236	U-238
N (# of data points)	11	11	5	10	11	11	11	11	11	11	11
Average	0.006	0.005	0.075	0.137	0.137	0.000	0.010	0.045	1.154	0.077	1.103
Max	0.011	0.063	0.112	0.343	0.243	0.002	0.021	0.239	1.400	0.131	1.360
Median	0.005	-0.003	0.075	0.090	0.142	0.000	0.009	0.012	1.120	0.059	1.060
STD	0.004	0.022	0.025	0.102	0.058	0.002	0.008	0.106	0.154	0.032	0.152
UCL (ProUCL 5.0)	0.00824	0.0177	0.0994	0.196	0.169	0.00106	0.0138	0.104	1.238	0.0943	1.186
Background	0.013	0.000	0.000	1.650	0.005	0.023	0.054	1.310	2.590	0.200	2.290
SAL (Construction)	85	4.1	7.7	18	37000	79	72	980	460	61	250
UCL Dose Estimate											
mrem/y	0.001	0.065	0.194	0.163	0.000	0.000	0.003	0.002	0.040	0.023	0.071
µSv/y	0.01	0.65	1.94	1.63	0.00	0.00	0.03	0.02	0.40	0.23	0.71

Sum

0.6 mrem/y

5.6 µSv/y

Appendix E

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	HASL-300:AM-241	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Am-241	0.00786	pCi/g	0.00416	0.0261	U	R5	3.34	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	HASL-300:AM-241	72-1021	C-2 Class 2 North 1	1772160.81	1650824	Am-241	0.195	pCi/g	0.0202	0.0302	NQ	NQ	2.35	SD		Y	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	HASL-300:AM-241	72-1022	C-2 Class 2 North 1	1772259.38	1650920	Am-241	0.0541	pCi/g	0.0134	0.0428	NQ	NQ	0.842	SD		Y	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	HASL-300:AM-241	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Am-241	0.018	pCi/g	0.0104	0.0498	U	R5	7.9	SD	U	N	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	HASL-300:AM-241	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Am-241	0.0813	pCi/g	0.0173	0.0563	NQ	NQ	2.28	SD		Y	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	HASL-300:AM-241	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Am-241	0.0862	pCi/g	0.0146	0.0276	NQ	NQ	7.51	SD		Y	GELC	22-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	HASL-300:AM-241	72-1026	C-2 Class 2 North 1	1772263.12	1651212	Am-241	0.0465	pCi/g	0.0116	0.0336	NQ	NQ	0.662	SD		Y	GELC	22-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	HASL-300:AM-241	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Am-241	0.0407	pCi/g	0.015	0.0752	U	R5	1.58	SD	U	N	GELC	30-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	HASL-300:AM-241	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Am-241	0.0306	pCi/g	0.0104	0.0503	U	R5	6.71	SD	U	N	GELC	23-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	HASL-300:AM-241	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Am-241	0.0176	pCi/g	0.011	0.0488	U	R5	4.85	SD	U	N	GELC	26-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	HASL-300:AM-241	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Am-241	0.0262	pCi/g	0.016	0.0428	U	R5	4.41	SD	U	N	GELC	23-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	EPA:901.1	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Co-60	-0.00273	pCi/g	0.0427	0.136	U	R5	3.34	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	EPA:901.1	72-1021	C-2 Class 2 North 1	1772160.81	1650824	Co-60	0.0239	pCi/g	0.0314	0.119	U	R5	2.35	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	EPA:901.1	72-1022	C-2 Class 2 North 1	1772259.38	1650920	Co-60	0.0469	pCi/g	0.031	0.0998	U	R5	0.842	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	EPA:901.1	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Co-60	0.0237	pCi/g	0.0234	0.0982	U	R5	7.9	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	EPA:901.1	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Co-60	-0.00242	pCi/g	0.0225	0.0861	U	R5	2.28	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	EPA:901.1	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Co-60	0.0165	pCi/g	0.0293	0.116	U	R5	7.51	SD	U	N	GELC	17-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	EPA:901.1	72-1026	C-2 Class 2 North 1	1772263.12	1651212	Co-60	-0.0104	pCi/g	0.0258	0.0953	U	R5	0.662	SD	U	N	GELC	17-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	EPA:901.1	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Co-60	-0.0128	pCi/g	0.0247	0.0866	U	R5	1.58	SD	U	N	GELC	17-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	EPA:901.1	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Co-60	0.0106	pCi/g	0.036	0.136	U	R5	6.71	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	EPA:901.1	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Co-60	0.0285	pCi/g	0.0244	0.103	U	R5	4.85	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	EPA:901.1	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Co-60	0.0163	pCi/g	0.0318	0.123	U	R5	4.41	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	EPA:901.1	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Cs-134	0.0876	pCi/g	0.0613	0.158	U	R5	3.34	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	EPA:901.1	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Cs-134	0.0739	pCi/g	0.0443	0.135	U	R5	7.9	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	EPA:901.1	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Cs-134	0.107	pCi/g	0.0431	0.118	U	R5	2.28	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	EPA:901.1	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Cs-134	0.111	pCi/g	0.0545	0.152	U	R5	7.51	SD	U	N	GELC	17-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	EPA:901.1	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Cs-134	0.0605	pCi/g	0.0483	0.107	U	R5	1.58	SD	U	N	GELC	17-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	EPA:901.1	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Cs-134	0.0731	pCi/g	0.0498	0.149	U	R5	6.71	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	EPA:901.1	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Cs-134	0.122	pCi/g	0.0389	0.124	U	R5	4.85	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	EPA:901.1	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Cs-134	0.134	pCi/g	0.0532	0.149	U	R5	4.41	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	EPA:901.1	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Cs-137	0.0999	pCi/g	0.0396	0.129	U	R5	3.34	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	EPA:901.1	72-1021	C-2 Class 2 North 1	1772160.81	1650824	Cs-137	0.28	pCi/g	0.0641	0.109	NQ	NQ	2.35	SD		Y	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	EPA:901.1	72-1022	C-2 Class 2 North 1	1772259.38	1650920	Cs-137	0.08	pCi/g	0.0303	0.124	U	R5	0.842	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	EPA:901.1	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Cs-137	0.022	pCi/g	0.0252	0.0884	U	R5	7.9	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	EPA:901.1	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Cs-137	0.274	pCi/g	0.0391	0.0916	NQ	NQ	2.28	SD		Y	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	EPA:901.1	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Cs-137	0.157	pCi/g	0.0593	0.102	U	R11	7.51	SD		N	GELC	17-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	EPA:901.1	72-1026	C-2 Class 2 North 1	1772263.12	1651212	Cs-137	0.0646	pCi/g	0.0249	0.103	U	R5	0.662	SD	U	N	GELC	17-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	EPA:901.1	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Cs-137	0.0873	pCi/g	0.0466	0.0869	U	R11	1.58	SD		N	GELC	17-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	EPA:901.1	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Cs-137	0.0295	pCi/g	0.0373	0.137	U	R5	6.71	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	EPA:901.1	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Cs-137	0.0463	pCi/g	0.0253	0.103	U	R5	4.85	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	EPA:901.1	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Cs-137	0.116	pCi/g	0.0532	0.0898	U	R11	4.41	SD		N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	EPA:906.0	72-1020	C-2 Class 2 North 1	1772070.08	1650819	H-3	0.29751	pCi/g	0.0105044	0.0199723	NQ	NQ	3.34	SD		Y	GELC	31-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	EPA:906.0	72-1021	C-2 Class 2 North 1	1772160.81	1650824	H-3	0.02768	pCi/g	0.00900051	0.0288786	U	R5	2.35	SD	U	N	GELC	31-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	EPA:906.0	72-1022	C-2 Class 2 North 1	1772259.38	1650920	H-3	2.88	pCi/g	1.31	4.02	U	R5	0.842	SD	U	N	GELC	26-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	EPA:906.0	72-1023	C-2 Class 2 North 1	1772162.05	1650921	H-3	0.00909	pCi/g	0.00520662	0.0171553	U	R5	7.9	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	EPA:906.0	72-1024	C-2 Class 2 North 1	1772260.63	1651017	H-3	-0.00439	pCi/g	0.0254318	0.0870282	U	R5	2.28	SD	U	N	GELC	31-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	EPA:906.0	72-1025	C-2 Class 2 North 1	1772261.87	1651115	H-3	0.04101	pCi/g	0.0049612	0.0141284	NQ	NQ	7.51	SD		Y	GELC	26-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	EPA:906.0	72-1026	C-2 Class 2 North 1	1772263.12	1651212	H-3	-0.238	pCi/g	0.923	3.85	U	R5	0.662	SD	U	N	GELC	26-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	EPA:906.0	72-1027	C-2 Class 2 North 1	1772264.36	1651309	H-3	0.0047	pCi/g	0.000977667	0.00300203	NQ	NQ	1.58	SD		Y	GELC	26-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	EPA:906.0	72-1028	C-2 Class 2 North 1	1772169.52	1651505	H-3	0.01388	pCi/g	0.00447381	0.0143133	U	R5	6.71	SD	U	N	GELC	24-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	EPA:906.0	72-1029	C-2 Class 2 North 1	1772170.77	1651603	H-3	0.02645	pCi/g	0.00429695	0.0129469	NQ	NQ	4.85	SD		Y	GELC	30-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	EPA:906.0	72-1030	C-2 Class 2 North 1	1772172.01	1651700	H-3	0.08443	pCi/g	0.00395373	0.00885783	NQ	NQ	4.41	SD		Y	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	EPA:901.1	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Na-22	0.0599	pCi/g	0.0443	0.174	U	R5	3.34	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	EPA:901.1	72-1021	C-2 Class 2 North 1	1772160.81	1650824	Na-22	0.0937	pCi/g	0.0495	0.124	U	R5	2.35	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	EPA:901.1	72-1022	C-2 Class 2 North 1	1772259.38	1650920	Na-22	-0.0343	pCi/g	0.0371	0.132	U	R5	0.842	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	EPA:901.1	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Na-22	0.053	pCi/g	0.0352	0.14	U	R5	7.9	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	EPA:901.1	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Na-22	0.0143	pCi/g	0.0255	0.0972	U	R5	2.28	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	EPA:901.1	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Na-22	0.0409	pCi/g	0.0383	0.137	U	R5	7.51	SD	U	N	GELC	17-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	EPA:901.1	72-1026	C-2 Class 2 North 1	1772263.12	1651212	Na-22	-0.0508	pCi/g	0.028	0.0933	U	R5	0.662	SD	U	N	GELC	17-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	EPA:901.1	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Na-22	-0.0373	pCi/g	0.0278	0.0934	U	R5	1.58	SD	U	N	GELC	17-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	EPA:901.1	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Na-22	-0.0144	pCi/g	0.037	0.132	U	R5	6.71	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	EPA:901.1	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Na-22	0.0253	pCi/g	0.0265	0.108	U	R5	4.85	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	EPA:901.1	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Na-22	-0.0488	pCi/g	0.0327	0.106	U	R5	4.41	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	HASL-300:ISOPU	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Pu-238	0.00322	pCi/g	0.00394	0.0234	U	R5	3.34	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	HASL-300:ISOPU	72-1021	C-2 Class 2 North 1	1772160.81	1650824	Pu-238	0.0265	pCi/g	0.0075	0.0214	NQ	NQ	2.35	SD		Y	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	HASL-300:ISOPU	72-1022	C-2 Class 2 North 1	1772259.38	1650920	Pu-238	0	pCi/g	0.00857	0.0228	U	R5	0.842	SD	U	N	GELC	24-Dec-14	02-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	HASL-300:ISOPU	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Pu-238	-0.00168	pCi/g	0.00444	0.0244	U	R5	7.9	SD	U	N	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	HASL-300:ISOPU	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Pu-238	0.00518	pCi/g	0.00456	0.0251	U	R5	2.28	SD	U	N	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	HASL-300:ISOPU	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Pu-238	0.0165	pCi/g	0.00616	0.0239	U	R5	7.51	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	HASL-300:ISOPU	72-1026	C-2 Class 2 North 1	1772263.12	1651212	Pu-238	0.00582	pCi/g	0.00582	0.0282	U	R5	0.662	SD	U	N	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	HASL-300:ISOPU	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Pu-238	0	pCi/g	0.00703	0.0324	U	R5	1.58	SD	U	N	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	HASL-300:ISOPU	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Pu-238	0.00116	pCi/g	0.00347	0.0168	U	R5	6.71	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	HASL-300:ISOPU	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Pu-238	0.0083	pCi/g	0.0055	0.0241	U	R5	4.85	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	HASL-300:ISOPU	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Pu-238	0.0183	pCi/g	0.00726	0.0242	U	R5	4.41	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	HASL-300:ISOPU	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Pu-239/240	0.0145	pCi/g	0.00534	0.0227	U	R5	3.34	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	HASL-300:ISOPU	72-1021	C-2 Class 2 North 1	1772160.81	1650824	Pu-239/240	2.6	pCi/g	0.062	0.0207	NQ	NQ	2.35	SD		Y	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	HASL-300:ISOPU	72-1022	C-2 Class 2 North 1	1772259.38	1650920	Pu-239/240	1.31	pCi/g	0.0456	0.022	NQ	NQ	0.842	SD		Y	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	HASL-300:ISOPU	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Pu-239/240	0.176	pCi/g	0.0181	0.0237	NQ	NQ	7.9	SD		Y	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	HASL-300:ISOPU	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Pu-239/240	1.45	pCi/g	0.0502	0.0243	NQ	NQ	2.28	SD		Y	GELC	24-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	HASL-300:ISOPU	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Pu-239/240	1.86	pCi/g	0.0555	0.0232	NQ	NQ	7.51	SD		Y	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	HASL-300:ISOPU	72-1026	C-2 Class 2 North 1	1772263.12	1651212	Pu-239/240	1.03	pCi/g	0.0447	0.0273	NQ	NQ	0.662	SD		Y	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	HASL-300:ISOPU	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Pu-239/240	0.531	pCi/g	0.0347	0.0313	NQ	NQ	1.58	SD		Y	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	HASL-300:ISOPU	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Pu-239/240	0.538	pCi/g	0.0251	0.0163	NQ	NQ	6.71	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	HASL-300:ISOPU	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Pu-239/240	0.461	pCi/g	0.0286	0.0234	NQ	NQ	4.85	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	HASL-300:ISOPU	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Pu-239/240	0.802	pCi/g	0.0369	0.0235	NQ	NQ	4.41	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	EPA:905.0	72-1020	C-2 Class 2 North 1	1772070.08	1650819	Sr-90	0.0566	pCi/g	0.0519	0.179	U	R5	3.34	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	EPA:905.0	72-1021	C-2 Class 2 North 1	1772160.81	1650824	Sr-90	0.0595	pCi/g	0.047	0.16	U	R5	2.35	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	EPA:905.0	72-1022	C-2 Class 2 North 1	1772259.38	1650920	Sr-90	0.0468	pCi/g	0.051	0.178	U	R5	0.842	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	EPA:905.0	72-1023	C-2 Class 2 North 1	1772162.05	1650921	Sr-90	-0.0734	pCi/g	0.0574	0.223	U	R5	7.9	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	EPA:905.0	72-1024	C-2 Class 2 North 1	1772260.63	1651017	Sr-90	0.115	pCi/g	0.0604	0.197	U	R5	2.28	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	EPA:905.0	72-1025	C-2 Class 2 North 1	1772261.87	1651115	Sr-90	0.115	pCi/g	0.0392	0.127	U	R5	7.51	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	EPA:905.0	72-1026	C-2 Class 2 North 1	1772263.12	1651212	Sr-90	0.106	pCi/g	0.0367	0.119	U	R5	0.662	SD	U	N	GELC	29-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	EPA:905.0	72-1027	C-2 Class 2 North 1	1772264.36	1651309	Sr-90	0.0529	pCi/g	0.041	0.136	U	R5	1.58	SD	U	N	GELC	29-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	EPA:905.0	72-1028	C-2 Class 2 North 1	1772169.52	1651505	Sr-90	-0.0754	pCi/g	0.0804	0.33	U	R5	6.71	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	EPA:905.0	72-1029	C-2 Class 2 North 1	1772170.77	1651603	Sr-90	-0.274	pCi/g	0.107	0.431	U	R5	4.85	SD	U	N	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	EPA:905.0	72-1030	C-2 Class 2 North 1	1772172.01	1651700	Sr-90	-0.00245	pCi/g	0.0682	0.26	U	R5	4.41	SD	U	N	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	HASL-300:ISOU	72-1020	C-2 Class 2 North 1	1772070.08	1650819	U-234	0.889	pCi/g	0.0631	0.102	NQ	NQ	3.34	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	HASL-300:ISOU	72-1021	C-2 Class 2 North 1	1772160.81	1650824	U-234	1.41	pCi/g	0.0742	0.0913	NQ	NQ	2.35	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	HASL-300:ISOU	72-1022	C-2 Class 2 North 1	1772259.38	1650920	U-234	0.795	pCi/g	0.0526	0.0808	NQ	NQ	0.842	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	HASL-300:ISOU	72-1023	C-2 Class 2 North 1	1772162.05	1650921	U-234	1.25	pCi/g	0.0768	0.11	NQ	NQ	7.9	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	HASL-300:ISOU	72-1024	C-2 Class 2 North 1	1772260.63	1651017	U-234	1.06	pCi/g	0.0607	0.0819	NQ	NQ	2.28	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	HASL-300:ISOU	72-1025	C-2 Class 2 North 1	1772261.87	1651115	U-234	1.35	pCi/g	0.0709	0.0878	NQ	NQ	7.51	SD		Y	GELC	22-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	HASL-300:ISOU	72-1026	C-2 Class 2 North 1	1772263.12	1651212	U-234	0.779	pCi/g	0.0599	0.0896	NQ	NQ	0.662	SD		Y	GELC	22-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	HASL-300:ISOU	72-1027	C-2 Class 2 North 1	1772264.36	1651309	U-234	0.402	pCi/g	0.0397	0.083	NQ	NQ	1.58	SD		Y	GELC	22-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	HASL-300:ISOU	72-1028	C-2 Class 2 North 1	1772169.52	1651505	U-234	1.42	pCi/g	0.0758	0.0943	NQ	NQ	6.71	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	HASL-300:ISOU	72-1029	C-2 Class 2 North 1	1772170.77	1651603	U-234	0.732	pCi/g	0.0495	0.0744	NQ	NQ	4.85	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	HASL-300:ISOU	72-1030	C-2 Class 2 North 1	1772172.01	1651700	U-234	1.33	pCi/g	0.067	0.0784	NQ	NQ	4.41	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	HASL-300:ISOU	72-1020	C-2 Class 2 North 1	1772070.08	1650819	U-235/236	0.0317	pCi/g	0.0167	0.0769	U	R5	3.34	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	HASL-300:ISOU	72-1021	C-2 Class 2 North 1	1772160.81	1650824	U-235/236	0.0712	pCi/g	0.0207	0.069	NQ	NQ	2.35	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	HASL-300:ISOU	72-1022	C-2 Class 2 North 1	1772259.38	1650920	U-235/236	0.0378	pCi/g	0.0151	0.0611	U	R5	0.842	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	HASL-300:ISOU	72-1023	C-2 Class 2 North 1	1772162.05	1650921	U-235/236	0.0798	pCi/g	0.0242	0.0829	U	R5	7.9	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	HASL-300:ISOU	72-1024	C-2 Class 2 North 1	1772260.63	1651017	U-235/236	0.0809	pCi/g	0.0204	0.0619	NQ	NQ	2.28	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	HASL-300:ISOU	72-1025	C-2 Class 2 North 1	1772261.87	1651115	U-235/236	0.0775	pCi/g	0.0199	0.0663	NQ	NQ	7.51	SD		Y	GELC	22-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	HASL-300:ISOU	72-1026	C-2 Class 2 North 1	1772263.12	1651212	U-235/236	0.014	pCi/g	0.0192	0.0677	U	R5	0.662	SD	U	N	GELC	22-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	HASL-300:ISOU	72-1027	C-2 Class 2 North 1	1772264.36	1651309	U-235/236	0.0388	pCi/g	0.0156	0.0628	U	R5	1.58	SD	U	N	GELC	22-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	HASL-300:ISOU	72-1028	C-2 Class 2 North 1	1772169.52	1651505	U-235/236	0.0834	pCi/g	0.0235	0.0713	J	R10	6.71	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	HASL-300:ISOU	72-1029	C-2 Class 2 North 1	1772170.77	1651603	U-235/236	0.0271	pCi/g	0.0128	0.0562	U	R5	4.85	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	HASL-300:ISOU	72-1030	C-2 Class 2 North 1	1772172.01	1651700	U-235/236	0.0611	pCi/g	0.0187	0.0593	NQ	NQ	4.41	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91132	HASL-300:ISOU	72-1020	C-2 Class 2 North 1	1772070.08	1650819	U-238	0.992	pCi/g	0.0657	0.0565	NQ	NQ	3.34	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91133	HASL-300:ISOU	72-1021	C-2 Class 2 North 1	1772160.81	1650824	U-238	1.34	pCi/g	0.072	0.0508	NQ	NQ	2.35	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91134	HASL-300:ISOU	72-1022	C-2 Class 2 North 1	1772259.38	1650920	U-238	0.883	pCi/g	0.0552	0.0449	NQ	NQ	0.842	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91135	HASL-300:ISOU	72-1023	C-2 Class 2 North 1	1772162.05	1650921	U-238	1.26	pCi/g	0.0771	0.0609	NQ	NQ	7.9	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91136	HASL-300:ISOU	72-1024	C-2 Class 2 North 1	1772260.63	1651017	U-238	1.16	pCi/g	0.0643	0.0455	NQ	NQ	2.28	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91137	HASL-300:ISOU	72-1025	C-2 Class 2 North 1	1772261.87	1651115	U-238	1.28	pCi/g	0.069	0.0488	NQ	NQ	7.51	SD		Y	GELC	22-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91138	HASL-300:ISOU	72-1026	C-2 Class 2 North 1	1772263.12	1651212	U-238	0.847	pCi/g	0.0589	0.0498	NQ	NQ	0.662	SD		Y	GELC	22-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91139	HASL-300:ISOU	72-1027	C-2 Class 2 North 1	1772264.36	1651309	U-238	0.447	pCi/g	0.0404	0.0462	NQ	NQ	1.58	SD		Y	GELC	22-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91140	HASL-300:ISOU	72-1028	C-2 Class 2 North 1	1772169.52	1651505	U-238	1.6	pCi/g	0.0803	0.0524	NQ	NQ	6.71	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91141	HASL-300:ISOU	72-1029	C-2 Class 2 North 1	1772170.77	1651603	U-238	0.716	pCi/g	0.0475	0.0414	NQ	NQ	4.85	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91142	HASL-300:ISOU	72-1030	C-2 Class 2 North 1	1772172.01	1651700	U-238	1.44	pCi/g	0.0693	0.0436	NQ	NQ	4.41	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	HASL-300:AM-241	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Am-241	-0.00651	pCi/g	0.00651	0.0541	U	R5	7.52	SD	U	N	GELC	26-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	HASL-300:AM-241	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Am-241	0.0208	pCi/g	0.00875	0.0394	U	R5	4.18	SD	U	N	GELC	23-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	HASL-300:AM-241	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Am-241	0.00984	pCi/g	0.00591	0.0327	U	R5	3.87	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	HASL-300:AM-241	72-1035	C-2 Class 2 North 2	1772106.27	1652124	Am-241	0.0512	pCi/g	0.0128	0.04	NQ	NQ	0.455	SD		Y	GELC	23-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	HASL-300:AM-241	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Am-241	0.00231	pCi/g	0.00517	0.0384	U	R5	7.21	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	HASL-300:AM-241	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Am-241	0.0109	pCi/g	0.0102	0.0452	U	R5	5.1	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	HASL-300:AM-241	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Am-241	0.13	pCi/g	0.018	0.0385	NQ	NQ	5.82	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	HASL-300:AM-241	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Am-241	0.0317	pCi/g	0.0106	0.0439	U	R5	9.3	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	HASL-300:AM-241	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Am-241	0.0672	pCi/g	0.0128	0.036	NQ	NQ	2.74	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	HASL-300:AM-241	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Am-241	0.0287	pCi/g	0.00995	0.0477	U	R5	5.52	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	HASL-300:AM-241	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Am-241	0.00637	pCi/g	0.009	0.0529	U	R5	6.24	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	HASL-300:AM-241	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Am-241	-0.00206	pCi/g	0.00617	0.0341	U	R5	3.48	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	HASL-300:AM-241	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Am-241	0.0512	pCi/g	0.013	0.0439	NQ	NQ	2.84	SD		Y	GELC	23-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	HASL-300:AM-241	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Am-241	0.106	pCi/g	0.0205	0.0552	NQ	NQ	1.95	SD		Y	GELC	26-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	EPA:901.1	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Co-60	-0.00351	pCi/g	0.0304	0.114	U	R5	7.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	EPA:901.1	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Co-60	-0.00947	pCi/g	0.028	0.103	U	R5	4.18	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	EPA:901.1	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Co-60	0.00061	pCi/g	0.0337	0.126	U	R5	3.87	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	EPA:901.1	72-1035	C-2 Class 2 North 2	1772106.27	1652124	Co-60	0.018	pCi/g	0.028	0.105	U	R5	0.455	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	EPA:901.1	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Co-60	-0.0347	pCi/g	0.0339	0.12	U	R5	7.21	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	EPA:901.1	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Co-60	-0.0111	pCi/g	0.0388	0.144	U	R5	5.1	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	EPA:901.1	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Co-60	-0.019	pCi/g	0.0378	0.113	U	R5	5.82	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	EPA:901.1	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Co-60	-0.00683	pCi/g	0.0299	0.111	U	R5	9.3	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	EPA:901.1	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Co-60	0.0221	pCi/g	0.0198	0.0804	U	R5	2.74	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	EPA:901.1	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Co-60	-0.0243	pCi/g	0.029	0.0999	U	R5	5.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	EPA:901.1	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Co-60	0.0398	pCi/g	0.0303	0.112	U	R5	6.24	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	EPA:901.1	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Co-60	0.0435	pCi/g	0.0342	0.138	U	R5	3.48	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	EPA:901.1	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Co-60	-0.0111	pCi/g	0.0312	0.114	U	R5	2.84	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	EPA:901.1	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Co-60	-0.013	pCi/g	0.0243	0.0865	U	R5	1.95	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	EPA:901.1	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Cs-134	0.0527	pCi/g	0.0299	0.12	U	R5	7.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	EPA:901.1	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Cs-134	0.0879	pCi/g	0.0325	0.114	U	R5	4.18	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	EPA:901.1	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Cs-134	0.0334	pCi/g	0.0388	0.148	U	R5	3.87	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	EPA:901.1	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Cs-134	0.165	pCi/g	0.0564	0.178	U	R5	7.21	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	EPA:901.1	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Cs-134	0.0317	pCi/g	0.0461	0.148	U	R5	5.1	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	EPA:901.1	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Cs-134	0.0854	pCi/g	0.0346	0.14	U	R5	5.82	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	EPA:901.1	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Cs-134	0.124	pCi/g	0.0423	0.128	U	R5	9.3	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	EPA:901.1	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Cs-134	0.0753	pCi/g	0.0291	0.0945	U	R5	2.74	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	EPA:901.1	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Cs-134	0.0979	pCi/g	0.0512	0.133	U	R5	5.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	EPA:901.1	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Cs-134	0.106	pCi/g	0.0329	0.137	U	R5	6.24	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	EPA:901.1	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Cs-134	0.128	pCi/g	0.0423	0.144	U	R5	3.48	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	EPA:901.1	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Cs-134	0.0544	pCi/g	0.0464	0.129	U	R5	2.84	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	EPA:901.1	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Cs-134	0.0927	pCi/g	0.0557	0.121	U	R5	1.95	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	EPA:901.1	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Cs-137	0.00114	pCi/g	0.0262	0.0978	U	R5	7.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	EPA:901.1	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Cs-137	0.0299	pCi/g	0.0241	0.0933	U	R5	4.18	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	EPA:901.1	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Cs-137	0.0549	pCi/g	0.0449	0.129	U	R5	3.87	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	EPA:901.1	72-1035	C-2 Class 2 North 2	1772106.27	1652124	Cs-137	0.124	pCi/g	0.0327	0.131	U	R5	0.455	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	EPA:901.1	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Cs-137	-0.0121	pCi/g	0.0341	0.12	U	R5	7.21	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	EPA:901.1	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Cs-137	0.00117	pCi/g	0.0352	0.128	U	R5	5.1	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	EPA:901.1	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Cs-137	0.192	pCi/g	0.0437	0.101	NQ	NQ	5.82	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	EPA:901.1	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Cs-137	0.192	pCi/g	0.0645	0.0967	U	R11	9.3	SD		N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	EPA:901.1	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Cs-137	0.246	pCi/g	0.0341	0.0731	NQ	NQ	2.74	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	EPA:901.1	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Cs-137	0.0907	pCi/g	0.0432	0.104	U	R5	5.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	EPA:901.1	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Cs-137	0.0278	pCi/g	0.031	0.0825	U	R5	6.24	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	EPA:901.1	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Cs-137	-0.0297	pCi/g	0.0315	0.108	U	R5	3.48	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	EPA:901.1	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Cs-137	0.264	pCi/g	0.0537	0.109	NQ	NQ	2.84	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	EPA:901.1	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Cs-137	0.0904	pCi/g	0.0427	0.106	U	R5	1.95	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	EPA:906.0	72-1031	C-2 Class 2 North 2	1772102.92	1651862	H-3	0.05212	pCi/g	0.00571644	0.016263	NQ	NQ	7.52	SD		Y	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	EPA:906.0	72-1033	C-2 Class 2 North 2	1772104.04	1651949	H-3	0.14788	pCi/g	0.00475496	0.00894281	NQ	NQ	4.18	SD		Y	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	EPA:906.0	72-1034	C-2 Class 2 North 2	1772105.15	1652036	H-3	0.01192	pCi/g	0.00491147	0.0159422	U	R5	3.87	SD	U	N	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	EPA:906.0	72-1035	C-2 Class 2 North 2	1772106.27	1652124	H-3	-0.761	pCi/g	1.21	4.95	U	R5	0.455	SD	U	N	GELC	29-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	EPA:906.0	72-1036	C-2 Class 2 North 2	1772020.14	1652212	H-3	0.03124	pCi/g	0.00507396	0.0153074	NQ	NQ	7.21	SD		Y	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	EPA:906.0	72-1037	C-2 Class 2 North 2	1772021.26	1652299	H-3	0.00554	pCi/g	0.00344478	0.011393	U	R5	5.1	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	EPA:906.0	72-1038	C-2 Class 2 North 2	1772022.38	1652386	H-3	0.13595	pCi/g	0.00583977	0.0126683	NQ	NQ	5.82	SD		Y	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	EPA:906.0	72-1039	C-2 Class 2 North 2	1772024.61	1652561	H-3	0.06655	pCi/g	0.007157	0.0203021	NQ	NQ	9.3	SD		Y	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	EPA:906.0	72-1040	C-2 Class 2 North 2	1772023.49	1652474	H-3	0.02775	pCi/g	0.0059161	0.0183963	NQ	NQ	2.74	SD		Y	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	EPA:906.0	72-1041	C-2 Class 2 North 2	1772002.73	1652649	H-3	0.1075	pCi/g	0.00514141	0.0116266	NQ	NQ	5.52	SD		Y	GELC	01-Jan-15	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	EPA:906.0	72-1042	C-2 Class 2 North 2	1771947.34	1652651	H-3	0.02489	pCi/g	0.00437253	0.0133106	NQ	NQ	6.24	SD		Y	GELC	01-Jan-15	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	EPA:906.0	72-1043	C-2 Class 2 North 2	1771939.6	1652736	H-3	0.08004	pCi/g	0.00403813	0.00937422	NQ	NQ	3.48	SD		Y	GELC	01-Jan-15	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	EPA:906.0	72-1044	C-2 Class 2 North 2	1771940.71	1652824	H-3	0.014	pCi/g	0.00362454	0.0114582	NQ	NQ	2.84	SD		Y	GELC	01-Jan-15	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	EPA:906.0	72-1045	C-2 Class 2 North 2	1771941.83	1652911	H-3	0.07975	pCi/g	0.00431566	0.0102422	NQ	NQ	1.95	SD		Y	GELC	01-Jan-15	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	EPA:901.1	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Na-22	-0.00134	pCi/g	0.0332	0.124	U	R5	7.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	EPA:901.1	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Na-22	-0.0182	pCi/g	0.0319	0.0973	U	R5	4.18	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	EPA:901.1	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Na-22	0.0382	pCi/g	0.0385	0.149	U	R5	3.87	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	EPA:901.1	72-1035	C-2 Class 2 North 2	1772106.27	1652124	Na-22	-0.0105	pCi/g	0.0386	0.115	U	R5	0.455	SD	U	N	GELC	19-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	EPA:901.1	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Na-22	-0.11	pCi/g	0.0375	0.109	U	R5	7.21	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	EPA:901.1	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Na-22	-0.0313	pCi/g	0.0566	0.171	U	R5	5.1	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	EPA:901.1	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Na-22	0.0187	pCi/g	0.0351	0.133	U	R5	5.82	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	EPA:901.1	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Na-22	-0.0232	pCi/g	0.0339	0.117	U	R5	9.3	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	EPA:901.1	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Na-22	-0.00912	pCi/g	0.0249	0.0899	U	R5	2.74	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	EPA:901.1	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Na-22	0.0395	pCi/g	0.0316	0.121	U	R5	5.52	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	EPA:901.1	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Na-22	0.0179	pCi/g	0.0344	0.115	U	R5	6.24	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	EPA:901.1	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Na-22	0.0324	pCi/g	0.0399	0.152	U	R5	3.48	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	EPA:901.1	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Na-22	-0.039	pCi/g	0.0346	0.119	U	R5	2.84	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	EPA:901.1	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Na-22	-0.0181	pCi/g	0.0307	0.107	U	R5	1.95	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	HASL-300:ISOPU	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Pu-238	0.00356	pCi/g	0.0101	0.0259	U	R5	7.52	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	HASL-300:ISOPU	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Pu-238	-0.00253	pCi/g	0.00438	0.0184	U	R5	4.18	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	HASL-300:ISOPU	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Pu-238	-0.00129	pCi/g	0.00224	0.0188	U	R5	3.87	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	HASL-300:ISOPU	72-1035	C-2 Class 2 North 2	1772106.27	1652124	Pu-238	0.00395	pCi/g	0.00437	0.0192	U	R5	0.455	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	HASL-300:ISOPU	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Pu-238	0.00354	pCi/g	0.00426	0.0172	U	R5	7.21	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	HASL-300:ISOPU	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Pu-238	-0.00113	pCi/g	0.00299	0.0165	U	R5	5.1	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	HASL-300:ISOPU	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Pu-238	0.00897	pCi/g	0.00776	0.0326	U	R5	5.82	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	HASL-300:ISOPU	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Pu-238	0.0119	pCi/g	0.00477	0.0193	U	R5	9.3	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	HASL-300:ISOPU	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Pu-238	0.00724	pCi/g	0.00341	0.0176	U	R5	2.74	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	HASL-300:ISOPU	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Pu-238	-0.00945	pCi/g	0.00589	0.0229	U	R5	5.52	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	HASL-300:ISOPU	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Pu-238	0.00263	pCi/g	0.00415	0.0191	U	R5	6.24	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	HASL-300:ISOPU	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Pu-238	0.00525	pCi/g	0.00321	0.0191	U	R5	3.48	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	HASL-300:ISOPU	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Pu-238	0.0152	pCi/g	0.00472	0.0184	U	R5	2.84	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	HASL-300:ISOPU	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Pu-238	0.00617	pCi/g	0.00534	0.0224	U	R5	1.95	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	HASL-300:ISOPU	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Pu-239/240	0.0517	pCi/g	0.0117	0.0251	NQ	NQ	7.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	HASL-300:ISOPU	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Pu-239/240	0.479	pCi/g	0.0251	0.0178	NQ	NQ	4.18	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	HASL-300:ISOPU	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Pu-239/240	0.495	pCi/g	0.0254	0.0182	NQ	NQ	3.87	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	HASL-300:ISOPU	72-1035	C-2 Class 2 North 2	1772106.27	1652124	Pu-239/240	1.1	pCi/g	0.0386	0.0186	NQ	NQ	0.455	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	HASL-300:ISOPU	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Pu-239/240	0.0271	pCi/g	0.00657	0.0166	NQ	NQ	7.21	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	HASL-300:ISOPU	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Pu-239/240	0.428	pCi/g	0.0222	0.0159	NQ	NQ	5.1	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	HASL-300:ISOPU	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Pu-239/240	3.73	pCi/g	0.0917	0.0316	NQ	NQ	5.82	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	HASL-300:ISOPU	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Pu-239/240	0.67	pCi/g	0.0301	0.0187	NQ	NQ	9.3	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	HASL-300:ISOPU	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Pu-239/240	1.6	pCi/g	0.0441	0.017	NQ	NQ	2.74	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	HASL-300:ISOPU	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Pu-239/240	0.17	pCi/g	0.017	0.0222	NQ	NQ	5.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	HASL-300:ISOPU	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Pu-239/240	0.0446	pCi/g	0.0089	0.0185	NQ	NQ	6.24	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	HASL-300:ISOPU	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Pu-239/240	0.0315	pCi/g	0.00718	0.0185	NQ	NQ	3.48	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	HASL-300:ISOPU	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Pu-239/240	1.17	pCi/g	0.0385	0.0178	NQ	NQ	2.84	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	HASL-300:ISOPU	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Pu-239/240	1.22	pCi/g	0.0441	0.0217	NQ	NQ	1.95	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	EPA:905.0	72-1031	C-2 Class 2 North 2	1772102.92	1651862	Sr-90	-0.0649	pCi/g	0.0809	0.327	U	R5	7.52	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	EPA:905.0	72-1033	C-2 Class 2 North 2	1772104.04	1651949	Sr-90	-0.151	pCi/g	0.057	0.26	U	R5	4.18	SD	U	N	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	EPA:905.0	72-1034	C-2 Class 2 North 2	1772105.15	1652036	Sr-90	0.205	pCi/g	0.0903	0.286	U	R5	3.87	SD	U	N	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	EPA:905.0	72-1035	C-2 Class 2 North 2	1772106.27	1652124	Sr-90	0.266	pCi/g	0.0965	0.296	U	R5	0.455	SD	U	N	GELC	31-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	EPA:905.0	72-1036	C-2 Class 2 North 2	1772020.14	1652212	Sr-90	-0.0244	pCi/g	0.0715	0.283	U	R5	7.21	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	EPA:905.0	72-1037	C-2 Class 2 North 2	1772021.26	1652299	Sr-90	-0.0383	pCi/g	0.0653	0.265	U	R5	5.1	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	EPA:905.0	72-1038	C-2 Class 2 North 2	1772022.38	1652386	Sr-90	-0.103	pCi/g	0.0799	0.321	U	R5	5.82	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	EPA:905.0	72-1039	C-2 Class 2 North 2	1772024.61	1652561	Sr-90	0.203	pCi/g	0.0899	0.284	U	R5	9.3	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	EPA:905.0	72-1040	C-2 Class 2 North 2	1772023.49	1652474	Sr-90	0.0799	pCi/g	0.0845	0.294	U	R5	2.74	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	EPA:905.0	72-1041	C-2 Class 2 North 2	1772002.73	1652649	Sr-90	-0.106	pCi/g	0.1	0.378	U	R5	5.52	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	EPA:905.0	72-1042	C-2 Class 2 North 2	1771947.34	1652651	Sr-90	0.0531	pCi/g	0.0635	0.228	U	R5	6.24	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	EPA:905.0	72-1043	C-2 Class 2 North 2	1771939.6	1652736	Sr-90	-0.126	pCi/g	0.0652	0.286	U	R5	3.48	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	EPA:905.0	72-1044	C-2 Class 2 North 2	1771940.71	1652824	Sr-90	0.281	pCi/g	0.0952	0.285	U	R5	2.84	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	EPA:905.0	72-1045	C-2 Class 2 North 2	1771941.83	1652911	Sr-90	-0.032	pCi/g	0.0723	0.278	U	R5	1.95	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	HASL-300:ISOU	72-1031	C-2 Class 2 North 2	1772102.92	1651862	U-234	1.6	pCi/g	0.0707	0.0731	NQ	NQ	7.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	HASL-300:ISOU	72-1033	C-2 Class 2 North 2	1772104.04	1651949	U-234	0.626	pCi/g	0.0457	0.068	NQ	NQ	4.18	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	HASL-300:ISOU	72-1034	C-2 Class 2 North 2	1772105.15	1652036	U-234	0.93	pCi/g	0.061	0.0906	NQ	NQ	3.87	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	HASL-300:ISOU	72-1035	C-2 Class 2 North 2	1772106.27	1652124	U-234	0.974	pCi/g	0.0578	0.0762	NQ	NQ	0.455	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	HASL-300:ISOU	72-1036	C-2 Class 2 North 2	1772020.14	1652212	U-234	1.45	pCi/g	0.0694	0.0753	NQ	NQ	7.21	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	HASL-300:ISOU	72-1037	C-2 Class 2 North 2	1772021.26	1652299	U-234	1.53	pCi/g	0.0655	0.0659	NQ	NQ	5.1	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	HASL-300:ISOU	72-1038	C-2 Class 2 North 2	1772022.38	1652386	U-234	1.01	pCi/g	0.0607	0.0852	NQ	NQ	5.82	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	HASL-300:ISOU	72-1039	C-2 Class 2 North 2	1772024.61	1652561	U-234	1.2	pCi/g	0.0601	0.0714	NQ	NQ	9.3	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	HASL-300:ISOU	72-1040	C-2 Class 2 North 2	1772023.49	1652474	U-234	1.03	pCi/g	0.0583	0.0746	NQ	NQ	2.74	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	HASL-300:ISOU	72-1041	C-2 Class 2 North 2	1772002.73	1652649	U-234	1.41	pCi/g	0.0682	0.0766	NQ	NQ	5.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	HASL-300:ISOU	72-1042	C-2 Class 2 North 2	1771947.34	1652651	U-234	1.22	pCi/g	0.065	0.0795	NQ	NQ	6.24	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	HASL-300:ISOU	72-1043	C-2 Class 2 North 2	1771939.6	1652736	U-234	1.59	pCi/g	0.0712	0.0748	NQ	NQ	3.48	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	HASL-300:ISOU	72-1044	C-2 Class 2 North 2	1771940.71	1652824	U-234	1.14	pCi/g	0.0611	0.0732	NQ	NQ	2.84	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	HASL-300:ISOU	72-1045	C-2 Class 2 North 2	1771941.83	1652911	U-234	1.06	pCi/g	0.0587	0.0736	NQ	NQ	1.95	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	HASL-300:ISOU	72-1031	C-2 Class 2 North 2	1772102.92	1651862	U-235/236	0.0987	pCi/g	0.0208	0.0552	NQ	NQ	7.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	HASL-300:ISOU	72-1033	C-2 Class 2 North 2	1772104.04	1651949	U-235/236	0.0283	pCi/g	0.0141	0.0514	U	R5	4.18	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	HASL-300:ISOU	72-1034	C-2 Class 2 North 2	1772105.15	1652036	U-235/236	0.0518	pCi/g	0.0205	0.0685	U	R5	3.87	SD	U	N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	HASL-300:ISOU	72-1035	C-2 Class 2 North 2	1772106.27	1652124	U-235/236	0.0594	pCi/g	0.0206	0.0576	U	R11	0.455	SD		N	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	HASL-300:ISOU	72-1036	C-2 Class 2 North 2	1772020.14	1652212	U-235/236	0.106	pCi/g	0.0232	0.0569	NQ	NQ	7.21	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	HASL-300:ISOU	72-1037	C-2 Class 2 North 2	1772021.26	1652299	U-235/236	0.0993	pCi/g	0.0191	0.0498	NQ	NQ	5.1	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	HASL-300:ISOU	72-1038	C-2 Class 2 North 2	1772022.38	1652386	U-235/236	0.0399	pCi/g	0.0203	0.0644	U	R5	5.82	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	HASL-300:ISOU	72-1039	C-2 Class 2 North 2	1772024.61	1652561	U-235/236	0.0705	pCi/g	0.0186	0.054	NQ	NQ	9.3	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	HASL-300:ISOU	72-1040	C-2 Class 2 North 2	1772023.49	1652474	U-235/236	0.0504	pCi/g	0.0169	0.0564	U	R5	2.74	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	HASL-300:ISOU	72-1041	C-2 Class 2 North 2	1772002.73	1652649	U-235/236	0.0717	pCi/g	0.0187	0.0579	NQ	NQ	5.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	HASL-300:ISOU	72-1042	C-2 Class 2 North 2	1771947.34	1652651	U-235/236	0.0867	pCi/g	0.0198	0.0601	NQ	NQ	6.24	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	HASL-300:ISOU	72-1043	C-2 Class 2 North 2	1771939.6	1652736	U-235/236	0.101	pCi/g	0.022	0.0565	NQ	NQ	3.48	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	HASL-300:ISOU	72-1044	C-2 Class 2 North 2	1771940.71	1652824	U-235/236	0.0608	pCi/g	0.0186	0.0553	NQ	NQ	2.84	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	HASL-300:ISOU	72-1045	C-2 Class 2 North 2	1771941.83	1652911	U-235/236	0.0803	pCi/g	0.0183	0.0557	NQ	NQ	1.95	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91143	HASL-300:ISOU	72-1031	C-2 Class 2 North 2	1772102.92	1651862	U-238	1.38	pCi/g	0.0665	0.0406	NQ	NQ	7.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91145	HASL-300:ISOU	72-1033	C-2 Class 2 North 2	1772104.04	1651949	U-238	0.721	pCi/g	0.0461	0.0378	NQ	NQ	4.18	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91146	HASL-300:ISOU	72-1034	C-2 Class 2 North 2	1772105.15	1652036	U-238	0.975	pCi/g	0.0624	0.0504	NQ	NQ	3.87	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91147	HASL-300:ISOU	72-1035	C-2 Class 2 North 2	1772106.27	1652124	U-238	0.859	pCi/g	0.0536	0.0424	NQ	NQ	0.455	SD		Y	GELC	22-Dec-14	03-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91148	HASL-300:ISOU	72-1036	C-2 Class 2 North 2	1772020.14	1652212	U-238	1.46	pCi/g	0.0688	0.0419	NQ	NQ	7.21	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91149	HASL-300:ISOU	72-1037	C-2 Class 2 North 2	1772021.26	1652299	U-238	1.44	pCi/g	0.0636	0.0366	NQ	NQ	5.1	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91150	HASL-300:ISOU	72-1038	C-2 Class 2 North 2	1772022.38	1652386	U-238	1.07	pCi/g	0.0621	0.0474	NQ	NQ	5.82	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91151	HASL-300:ISOU	72-1039	C-2 Class 2 North 2	1772024.61	1652561	U-238	1.24	pCi/g	0.0616	0.0397	NQ	NQ	9.3	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91152	HASL-300:ISOU	72-1040	C-2 Class 2 North 2	1772023.49	1652474	U-238	1.02	pCi/g	0.0571	0.0415	NQ	NQ	2.74	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91153	HASL-300:ISOU	72-1041	C-2 Class 2 North 2	1772002.73	1652649	U-238	1.38	pCi/g	0.067	0.0426	NQ	NQ	5.52	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91154	HASL-300:ISOU	72-1042	C-2 Class 2 North 2	1771947.34	1652651	U-238	1.47	pCi/g	0.0708	0.0442	NQ	NQ	6.24	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91155	HASL-300:ISOU	72-1043	C-2 Class 2 North 2	1771939.6	1652736	U-238	1.65	pCi/g	0.0726	0.0416	NQ	NQ	3.48	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91156	HASL-300:ISOU	72-1044	C-2 Class 2 North 2	1771940.71	1652824	U-238	1.17	pCi/g	0.0605	0.0407	NQ	NQ	2.84	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91157	HASL-300:ISOU	72-1045	C-2 Class 2 North 2	1771941.83	1652911	U-238	1.11	pCi/g	0.0594	0.0409	NQ	NQ	1.95	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	HASL-300:AM-241	72-1046	C-2 Class 2 South 1	1770883.65	1649972	Am-241	0.051	pCi/g	0.0129	0.0446	NQ	NQ	6.42	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	HASL-300:AM-241	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Am-241	-0.00219	pCi/g	0.00579	0.0363	U	R5	9.26	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	HASL-300:AM-241	72-1048	C-2 Class 2 South 1	1770980.5	1650159	Am-241	0.061	pCi/g	0.0172	0.0596	NQ	NQ	6.66	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	HASL-300:AM-241	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Am-241	0.146	pCi/g	0.0164	0.0285	NQ	NQ	4.15	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	HASL-300:AM-241	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Am-241	0.18	pCi/g	0.0191	0.0318	NQ	NQ	4.35	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	HASL-300:AM-241	72-1051	C-2 Class 2 South 1	1771269.87	1650628	Am-241	0.119	pCi/g	0.0162	0.0315	NQ	NQ	8.06	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	HASL-300:AM-241	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Am-241	0.333	pCi/g	0.0268	0.0346	NQ	NQ	6.6	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	HASL-300:AM-241	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Am-241	0.234	pCi/g	0.0215	0.0317	NQ	NQ	2.2	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	HASL-300:AM-241	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Am-241	0.244	pCi/g	0.0195	0.0239	NQ	NQ	9.41	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	HASL-300:AM-241	72-1062	C-2 Class 2 South 1	1771559.23	1651096	Am-241	0.505	pCi/g	0.0292	0.0268	NQ	NQ	10.5	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	HASL-300:AM-241	72-1063	C-2 Class 2 South 1	1771560.43	1651191	Am-241	0.0325	pCi/g	0.0113	0.0318	U	R11	6.3	SD		N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	EPA:901.1	72-1046	C-2 Class 2 South 1	1770883.65	1649972	Co-60	0.019	pCi/g	0.023	0.0833	U	R5	6.42	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	EPA:901.1	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Co-60	-0.042	pCi/g	0.0329	0.112	U	R5	9.26	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	EPA:901.1	72-1048	C-2 Class 2 South 1	1770980.5	1650159	Co-60	-0.0423	pCi/g	0.0294	0.0942	U	R5	6.66	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	EPA:901.1	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Co-60	-0.045	pCi/g	0.0306	0.0811	U	R5	4.15	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	EPA:901.1	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Co-60	-0.00982	pCi/g	0.0264	0.0981	U	R5	4.35	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	EPA:901.1	72-1051	C-2 Class 2 South 1	1771269.87	1650628	Co-60	-0.0279	pCi/g	0.0267	0.0954	U	R5	8.06	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	EPA:901.1	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Co-60	0.00046	pCi/g	0.0376	0.146	U	R5	6.6	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	EPA:901.1	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Co-60	-0.00189	pCi/g	0.0335	0.122	U	R5	2.2	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	EPA:901.1	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Co-60	-0.0379	pCi/g	0.0199	0.0621	U	R5	9.41	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	EPA:901.1	72-1062	C-2 Class 2 South 1	1771559.23	1651096	Co-60	-0.0135	pCi/g	0.0371	0.13	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	EPA:901.1	72-1063	C-2 Class 2 South 1	1771560.43	1651191	Co-60	-0.00259	pCi/g	0.0225	0.0723	U	R5	6.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	EPA:901.1	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Cs-134	0.0738	pCi/g	0.032	0.13	U	R5	9.26	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	EPA:901.1	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Cs-134	0.118	pCi/g	0.0395	0.147	U	R5	4.15	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	EPA:901.1	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Cs-134	0.0861	pCi/g	0.0345	0.138	U	R5	4.35	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	EPA:901.1	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Cs-134	0.084	pCi/g	0.0476	0.179	U	R5	6.6	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	EPA:901.1	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Cs-134	0.12	pCi/g	0.0413	0.155	U	R5	2.2	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	EPA:901.1	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Cs-134	0.0923	pCi/g	0.0359	0.0959	U	R5	9.41	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	EPA:901.1	72-1046	C-2 Class 2 South 1	1770883.65	1649972	Cs-137	0.178	pCi/g	0.0383	0.0776	NQ	NQ	6.42	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	EPA:901.1	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Cs-137	0.0486	pCi/g	0.0308	0.121	U	R5	9.26	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	EPA:901.1	72-1048	C-2 Class 2 South 1	1770980.5	1650159	Cs-137	0.602	pCi/g	0.0596	0.0886	NQ	NQ	6.66	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	EPA:901.1	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Cs-137	0.933	pCi/g	0.0725	0.112	NQ	NQ	4.15	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	EPA:901.1	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Cs-137	0.686	pCi/g	0.0583	0.113	NQ	NQ	4.35	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	EPA:901.1	72-1051	C-2 Class 2 South 1	1771269.87	1650628	Cs-137	0.564	pCi/g	0.055	0.116	NQ	NQ	8.06	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	EPA:901.1	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Cs-137	1.38	pCi/g	0.107	0.156	NQ	NQ	6.6	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	EPA:901.1	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Cs-137	1.29	pCi/g	0.089	0.107	NQ	NQ	2.2	SD		Y	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	EPA:901.1	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Cs-137	1.22	pCi/g	0.0496	0.0752	NQ	NQ	9.41	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	EPA:901.1	72-1062	C-2 Class 2 South 1	1771559.23	1651096	Cs-137	2.05	pCi/g	0.092	0.133	NQ	NQ	10.5	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	EPA:901.1	72-1063	C-2 Class 2 South 1	1771560.43	1651191	Cs-137	0.197	pCi/g	0.034	0.0825	NQ	NQ	6.3	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	EPA:906.0	72-1046	C-2 Class 2 South 1	1770883.65	1649972	H-3	0.17357	pCi/g	0.00671637	0.0138581	NQ	NQ	6.42	SD		Y	GELC	26-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	EPA:906.0	72-1047	C-2 Class 2 South 1	1770884.86	1650066	H-3	0.17144	pCi/g	0.01643	0.0381666	NQ	NQ	9.26	SD		Y	GELC	24-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	EPA:906.0	72-1048	C-2 Class 2 South 1	1770980.5	1650159	H-3	0.04973	pCi/g	0.00941847	0.026757	NQ	NQ	6.66	SD		Y	GELC	24-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	EPA:906.0	72-1049	C-2 Class 2 South 1	1771076.15	1650253	H-3	0.08183	pCi/g	0.00727387	0.0164095	NQ	NQ	4.15	SD		Y	GELC	24-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	EPA:906.0	72-1050	C-2 Class 2 South 1	1771174.22	1650535	H-3	0.07868	pCi/g	0.00750392	0.0174182	NQ	NQ	4.35	SD		Y	GELC	24-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	EPA:906.0	72-1051	C-2 Class 2 South 1	1771269.87	1650628	H-3	0.03752	pCi/g	0.0108706	0.0334007	NQ	NQ	8.06	SD		Y	GELC	24-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	EPA:906.0	72-1052	C-2 Class 2 South 1	1771365.51	1650721	H-3	0.03251	pCi/g	0.00423276	0.0121542	NQ	NQ	6.6	SD		Y	GELC	27-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	EPA:906.0	72-1053	C-2 Class 2 South 1	1771461.16	1650814	H-3	-0.163	pCi/g	0.979	4.06	U	R5	2.2	SD	U	N	GELC	26-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	EPA:906.0	72-1061	C-2 Class 2 South 1	1771558.02	1651002	H-3	0.12465	pCi/g	0.00747897	0.0179703	NQ	NQ	9.41	SD		Y	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	EPA:906.0	72-1062	C-2 Class 2 South 1	1771559.23	1651096	H-3	0.12788	pCi/g	0.00836481	0.020648	NQ	NQ	10.5	SD		Y	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	EPA:906.0	72-1063	C-2 Class 2 South 1	1771560.43	1651191	H-3	0.02763	pCi/g	0.00409466	0.0121025	NQ	NQ	6.3	SD		Y	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	EPA:901.1	72-1046	C-2 Class 2 South 1	1770883.65	1649972	Na-22	-0.0672	pCi/g	0.0251	0.0776	U	R5	6.42	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	EPA:901.1	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Na-22	-0.0593	pCi/g	0.0421	0.138	U	R5	9.26	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	EPA:901.1	72-1048	C-2 Class 2 South 1	1770980.5	1650159	Na-22	-0.0311	pCi/g	0.031	0.103	U	R5	6.66	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	EPA:901.1	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Na-22	0.0194	pCi/g	0.0339	0.116	U	R5	4.15	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	EPA:901.1	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Na-22	0.0594	pCi/g	0.0349	0.142	U	R5	4.35	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	EPA:901.1	72-1051	C-2 Class 2 South 1	1771269.87	1650628	Na-22	-0.0452	pCi/g	0.0355	0.116	U	R5	8.06	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	EPA:901.1	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Na-22	-0.0665	pCi/g	0.0398	0.132	U	R5	6.6	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	EPA:901.1	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Na-22	0.0064	pCi/g	0.0403	0.146	U	R5	2.2	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	EPA:901.1	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Na-22	-0.0153	pCi/g	0.0231	0.0781	U	R5	9.41	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	EPA:901.1	72-1062	C-2 Class 2 South 1	1771559.23	1651096	Na-22	-0.0206	pCi/g	0.0392	0.136	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	EPA:901.1	72-1063	C-2 Class 2 South 1	1771560.43	1651191	Na-22	0.00496	pCi/g	0.0267	0.0945	U	R5	6.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	HASL-300:ISOPU	72-1046	C-2 Class 2 South 1	1770883.65	1649972	Pu-238	0	pCi/g	0.00407	0.0187	U	R5	6.42	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	HASL-300:ISOPU	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Pu-238	0	pCi/g	0.0049	0.0356	U	R5	9.26	SD	U	N	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	HASL-300:ISOPU	72-1048	C-2 Class 2 South 1	1770980.5	1650159	Pu-238	0.00333	pCi/g	0.00472	0.0243	U	R5	6.66	SD	U	N	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	HASL-300:ISOPU	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Pu-238	0.00995	pCi/g	0.00574	0.0241	U	R5	4.15	SD	U	N	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	HASL-300:ISOPU	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Pu-238	0.0139	pCi/g	0.0065	0.0253	U	R5	4.35	SD	U	N	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	HASL-300:ISOPU	72-1051	C-2 Class 2 South 1	1771269.87	1650628	Pu-238	0.0195	pCi/g	0.00729	0.0284	U	R5	8.06	SD	U	N	GELC	18-Dec-14	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	HASL-300:ISOPU	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Pu-238	0.0849	pCi/g	0.014	0.0268	NQ	NQ	6.6	SD		Y	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	HASL-300:ISOPU	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Pu-238	0.037	pCi/g	0.0131	0.0449	U	R5	2.2	SD	U	N	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	HASL-300:ISOPU	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Pu-238	0.0429	pCi/g	0.00864	0.0187	NQ	NQ	9.41	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	HASL-300:ISOPU	72-1062	C-2 Class 2 South 1	1771559.23	1651096	Pu-238	0.0556	pCi/g	0.00995	0.0174	NQ	NQ	10.5	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	HASL-300:ISOPU	72-1063	C-2 Class 2 South 1	1771560.43	1651191	Pu-238	0.00967	pCi/g	0.00481	0.0202	U	R5	6.3	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	HASL-300:ISOPU	72-1046	C-2 Class 2 South 1	1770883.65	1649972	Pu-239/240	0.0348	pCi/g	0.00762	0.0182	NQ	NQ	6.42	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	HASL-300:ISOPU	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Pu-239/240	0.0147	pCi/g	0.0109	0.0345	U	R5	9.26	SD	U	N	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	HASL-300:ISOPU	72-1048	C-2 Class 2 South 1	1770980.5	1650159	Pu-239/240	0.223	pCi/g	0.0196	0.0235	NQ	NQ	6.66	SD		Y	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	HASL-300:ISOPU	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Pu-239/240	0.249	pCi/g	0.0208	0.0234	NQ	NQ	4.15	SD		Y	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	HASL-300:ISOPU	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Pu-239/240	0.174	pCi/g	0.018	0.0245	NQ	NQ	4.35	SD		Y	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	HASL-300:ISOPU	72-1051	C-2 Class 2 South 1	1771269.87	1650628	Pu-239/240	0.216	pCi/g	0.0226	0.0275	NQ	NQ	8.06	SD		Y	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	HASL-300:ISOPU	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Pu-239/240	0.312	pCi/g	0.0245	0.026	NQ	NQ	6.6	SD		Y	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	HASL-300:ISOPU	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Pu-239/240	0.382	pCi/g	0.0357	0.0434	NQ	NQ	2.2	SD		Y	GELC	18-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	HASL-300:ISOPU	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Pu-239/240	0.28	pCi/g	0.0201	0.0181	NQ	NQ	9.41	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	HASL-300:ISOPU	72-1062	C-2 Class 2 South 1	1771559.23	1651096	Pu-239/240	0.595	pCi/g	0.0265	0.0168	NQ	NQ	10.5	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	HASL-300:ISOPU	72-1063	C-2 Class 2 South 1	1771560.43	1651191	Pu-239/240	0.0489	pCi/g	0.00952	0.0196	NQ	NQ	6.3	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	EPA:905.0	72-1046	C-2 Class 2 South 1	1770883.65	1649972	Sr-90	0.062	pCi/g	0.076	0.268	U	R5	6.42	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	EPA:905.0	72-1047	C-2 Class 2 South 1	1770884.86	1650066	Sr-90	-0.0852	pCi/g	0.0402	0.175	U	R5	9.26	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	EPA:905.0	72-1048	C-2 Class 2 South 1	1770980.5	1650159	Sr-90	0.125	pCi/g	0.0484	0.148	U	R5	6.66	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	EPA:905.0	72-1049	C-2 Class 2 South 1	1771076.15	1650253	Sr-90	0.0632	pCi/g	0.0466	0.158	U	R5	4.15	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	EPA:905.0	72-1050	C-2 Class 2 South 1	1771174.22	1650535	Sr-90	0.0793	pCi/g	0.0511	0.17	U	R5	4.35	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	EPA:905.0	72-1051	C-2 Class 2 South 1	1771269.87	1650628	Sr-90	-0.093	pCi/g	0.0426	0.186	U	R5	8.06	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	EPA:905.0	72-1052	C-2 Class 2 South 1	1771365.51	1650721	Sr-90	0.485	pCi/g	0.038	0.105	NQ	NQ	6.6	SD		Y	GELC	29-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	EPA:905.0	72-1053	C-2 Class 2 South 1	1771461.16	1650814	Sr-90	0.0617	pCi/g	0.038	0.126	U	R5	2.2	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	EPA:905.0	72-1061	C-2 Class 2 South 1	1771558.02	1651002	Sr-90	1.24	pCi/g	0.407	1.24	U	R5	9.41	SD		N	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	EPA:905.0	72-1062	C-2 Class 2 South 1	1771559.23	1651096	Sr-90	0.204	pCi/g	0.103	0.334	U	R5	10.5	SD	U	N	GELC	07-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	EPA:905.0	72-1063	C-2 Class 2 South 1	1771560.43	1651191	Sr-90	-0.0435	pCi/g	0.0579	0.22	U	R5	6.3	SD	U	N	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	HASL-300:ISOU	72-1046	C-2 Class 2 South 1	1770883.65	1649972	U-234	1.41	pCi/g	0.0714	0.0805	NQ	NQ	6.42	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	HASL-300:ISOU	72-1047	C-2 Class 2 South 1	1770884.86	1650066	U-234	1.18	pCi/g	0.0692	0.0891	NQ	NQ	9.26	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	HASL-300:ISOU	72-1048	C-2 Class 2 South 1	1770980.5	1650159	U-234	1.63	pCi/g	0.0898	0.11	NQ	NQ	6.66	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	HASL-300:ISOU	72-1049	C-2 Class 2 South 1	1771076.15	1650253	U-234	1.67	pCi/g	0.093	0.118	NQ	NQ	4.15	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	HASL-300:ISOU	72-1050	C-2 Class 2 South 1	1771174.22	1650535	U-234	1.36	pCi/g	0.0749	0.0955	NQ	NQ	4.35	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	HASL-300:ISOU	72-1051	C-2 Class 2 South 1	1771269.87	1650628	U-234	1.5	pCi/g	0.0769	0.0918	NQ	NQ	8.06	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	HASL-300:ISOU	72-1052	C-2 Class 2 South 1	1771365.51	1650721	U-234	1.75	pCi/g	0.0869	0.101	NQ	NQ	6.6	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	HASL-300:ISOU	72-1053	C-2 Class 2 South 1	1771461.16	1650814	U-234	1.45	pCi/g	0.0679	0.0745	NQ	NQ	2.2	SD		Y	GELC	23-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	HASL-300:ISOU	72-1061	C-2 Class 2 South 1	1771558.02	1651002	U-234	1.21	pCi/g	0.0914	0.151	NQ	NQ	9.41	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	HASL-300:ISOU	72-1062	C-2 Class 2 South 1	1771559.23	1651096	U-234	1.6	pCi/g	0.0906	0.118	NQ	NQ	10.5	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	HASL-300:ISOU	72-1063	C-2 Class 2 South 1	1771560.43	1651191	U-234	1.21	pCi/g	0.0827	0.125	NQ	NQ	6.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	HASL-300:ISOU	72-1046	C-2 Class 2 South 1	1770883.65	1649972	U-235/236	0.0962	pCi/g	0.0225	0.0608	NQ	NQ	6.42	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	HASL-300:ISOU	72-1047	C-2 Class 2 South 1	1770884.86	1650066	U-235/236	0.0741	pCi/g	0.0227	0.0674	NQ	NQ	9.26	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	HASL-300:ISOU	72-1048	C-2 Class 2 South 1	1770980.5	1650159	U-235/236	0.0572	pCi/g	0.0214	0.0832	U	R5	6.66	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	HASL-300:ISOU	72-1049	C-2 Class 2 South 1	1771076.15	1650253	U-235/236	0.0858	pCi/g	0.0245	0.0892	U	R5	4.15	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	HASL-300:ISOU	72-1050	C-2 Class 2 South 1	1771174.22	1650535	U-235/236	0.0844	pCi/g	0.0216	0.0722	NQ	NQ	4.35	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	HASL-300:ISOU	72-1051	C-2 Class 2 South 1	1771269.87	1650628	U-235/236	0.0858	pCi/g	0.0224	0.0694	NQ	NQ	8.06	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	HASL-300:ISOU	72-1052	C-2 Class 2 South 1	1771365.51	1650721	U-235/236	0.0891	pCi/g	0.0228	0.0762	NQ	NQ	6.6	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	HASL-300:ISOU	72-1053	C-2 Class 2 South 1	1771461.16	1650814	U-235/236	0.0852	pCi/g	0.019	0.0563	NQ	NQ	2.2	SD		Y	GELC	23-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	HASL-300:ISOU	72-1061	C-2 Class 2 South 1	1771558.02	1651002	U-235/236	0.00787	pCi/g	0.0236	0.115	U	R5	9.41	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	HASL-300:ISOU	72-1062	C-2 Class 2 South 1	1771559.23	1651096	U-235/236	0.0489	pCi/g	0.0193	0.0888	U	R5	10.5	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	HASL-300:ISOU	72-1063	C-2 Class 2 South 1	1771560.43	1651191	U-235/236	0.0777	pCi/g	0.0242	0.0942	U	R5	6.3	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91158	HASL-300:ISOU	72-1046	C-2 Class 2 South 1	1770883.65	1649972	U-238	1.32	pCi/g	0.0685	0.0447	NQ	NQ	6.42	SD		Y	GELC	28-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91159	HASL-300:ISOU	72-1047	C-2 Class 2 South 1	1770884.86	1650066	U-238	1.26	pCi/g	0.0704	0.0496	J	R10	9.26	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91160	HASL-300:ISOU	72-1048	C-2 Class 2 South 1	1770980.5	1650159	U-238	1.64	pCi/g	0.0883	0.0612	NQ	NQ	6.66	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91161	HASL-300:ISOU	72-1049	C-2 Class 2 South 1	1771076.15	1650253	U-238	1.63	pCi/g	0.0905	0.0656	NQ	NQ	4.15	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91162	HASL-300:ISOU	72-1050	C-2 Class 2 South 1	1771174.22	1650535	U-238	1.35	pCi/g	0.0745	0.0531	NQ	NQ	4.35	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91163	HASL-300:ISOU	72-1051	C-2 Class 2 South 1	1771269.87	1650628	U-238	1.44	pCi/g	0.0746	0.051	NQ	NQ	8.06	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91164	HASL-300:ISOU	72-1052	C-2 Class 2 South 1	1771365.51	1650721	U-238	1.79	pCi/g	0.0873	0.056	NQ	NQ	6.6	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91165	HASL-300:ISOU	72-1053	C-2 Class 2 South 1	1771461.16	1650814	U-238	1.39	pCi/g	0.0663	0.0414	NQ	NQ	2.2	SD		Y	GELC	23-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91173	HASL-300:ISOU	72-1061	C-2 Class 2 South 1	1771558.02	1651002	U-238	1.36	pCi/g	0.0947	0.0842	NQ	NQ	9.41	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91174	HASL-300:ISOU	72-1062	C-2 Class 2 South 1	1771559.23	1651096	U-238	1.48	pCi/g	0.0864	0.0653	NQ	NQ	10.5	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91175	HASL-300:ISOU	72-1063	C-2 Class 2 South 1	1771560.43	1651191	U-238	1.19	pCi/g	0.0807	0.0693	NQ	NQ	6.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	HASL-300:AM-241	72-1060	C-2 Class 2 South 2	1771571.1	1651596	Am-241	0.0228	pCi/g	0.00759	0.0315	U	R5	12.3	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	HASL-300:AM-241	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Am-241	0.452	pCi/g	0.0244	0.0218	NQ	NQ	3.92	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	HASL-300:AM-241	72-1065	C-2 Class 2 South 2	1771566.44	1651781	Am-241	0.33	pCi/g	0.0249	0.0305	NQ	NQ	8.5	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	HASL-300:AM-241	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Am-241	0.0159	pCi/g	0.00497	0.0221	U	R5	13.7	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	HASL-300:AM-241	72-1068	C-2 Class 2 South 2	1771475.54	1652000	Am-241	0.69	pCi/g	0.0315	0.0231	NQ	NQ	7.32	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	HASL-300:AM-241	72-1069	C-2 Class 2 South 2	1771580.11	1652301	Am-241	-0.00344	pCi/g	0.0073	0.0286	U	R5	9.85	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	HASL-300:AM-241	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Am-241	0.00551	pCi/g	0.00551	0.0305	U	R5	10.6	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	HASL-300:AM-241	72-1071	C-2 Class 2 South 2	1771703.82	1652382	Am-241	0.00331	pCi/g	0.00468	0.0275	U	R5	8.86	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	HASL-300:AM-241	72-1072	C-2 Class 2 South 2	1771683.4	1652501	Am-241	0.12	pCi/g	0.0158	0.0301	NQ	NQ	12.3	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	HASL-300:AM-241	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Am-241	-0.00676	pCi/g	0.00747	0.0374	U	R5	11.9	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	HASL-300:AM-241	72-1074	C-2 Class 2 South 2	1771728.39	1652892	Am-241	0.0714	pCi/g	0.0182	0.0593	NQ	NQ	4.79	SD		Y	GELC	28-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	HASL-300:AM-241	72-1075	C-2 Class 2 South 2	1771748.62	1652801	Am-241	0.0151	pCi/g	0.00842	0.0313	U	R5	9.52	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	EPA:901.1	72-1060	C-2 Class 2 South 2	1771571.1	1651596	Co-60	0.0069	pCi/g	0.0177	0.063	U	R5	12.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	EPA:901.1	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Co-60	0.044	pCi/g	0.0368	0.116	U	R5	3.92	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	EPA:901.1	72-1065	C-2 Class 2 South 2	1771566.44	1651781	Co-60	-0.00589	pCi/g	0.0211	0.0747	U	R5	8.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	EPA:901.1	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Co-60	-0.0206	pCi/g	0.0263	0.0887	U	R5	13.7	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	EPA:901.1	72-1068	C-2 Class 2 South 2	1771475.54	1652000	Co-60	-0.00207	pCi/g	0.0226	0.0677	U	R5	7.32	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	EPA:901.1	72-1069	C-2 Class 2 South 2	1771580.11	1652301	Co-60	0.04	pCi/g	0.0214	0.0759	U	R5	9.85	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	EPA:901.1	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Co-60	0.00105	pCi/g	0.0206	0.0743	U	R5	10.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	EPA:901.1	72-1071	C-2 Class 2 South 2	1771703.82	1652382	Co-60	0.00682	pCi/g	0.0163	0.0612	U	R5	8.86	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	EPA:901.1	72-1072	C-2 Class 2 South 2	1771683.4	1652501	Co-60	0.00167	pCi/g	0.0263	0.0823	U	R5	12.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	EPA:901.1	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Co-60	-0.0593	pCi/g	0.0301	0.0979	U	R5	11.9	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	EPA:901.1	72-1074	C-2 Class 2 South 2	1771728.39	1652892	Co-60	0.00943	pCi/g	0.0165	0.0636	U	R5	4.79	SD	U	N	GELC	23-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	EPA:901.1	72-1075	C-2 Class 2 South 2	1771748.62	1652801	Co-60	0.0291	pCi/g	0.0213	0.0796	U	R5	9.52	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	EPA:901.1	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Cs-134	0.105	pCi/g	0.0429	0.126	U	R5	3.92	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	EPA:901.1	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Cs-134	0.128	pCi/g	0.0414	0.13	U	R5	13.7	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	EPA:901.1	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Cs-134	0.0975	pCi/g	0.0352	0.103	U	R5	10.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	EPA:901.1	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Cs-134	0.105	pCi/g	0.0383	0.137	U	R5	11.9	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	EPA:901.1	72-1060	C-2 Class 2 South 2	1771571.1	1651596	Cs-137	0.778	pCi/g	0.0362	0.0612	NQ	NQ	12.3	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	EPA:901.1	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Cs-137	13.4	pCi/g	0.19	0.101	NQ	NQ	3.92	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	EPA:901.1	72-1065	C-2 Class 2 South 2	1771566.44	1651781	Cs-137	1.04	pCi/g	0.0592	0.0772	NQ	NQ	8.5	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	EPA:901.1	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Cs-137	0.0658	pCi/g	0.0332	0.092	U	R5	13.7	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	EPA:901.1	72-1068	C-2 Class 2 South 2	1771475.54	1652000	Cs-137	3.89	pCi/g	0.0821	0.0799	NQ	NQ	7.32	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	EPA:901.1	72-1069	C-2 Class 2 South 2	1771580.11	1652301	Cs-137	0.424	pCi/g	0.0361	0.0775	NQ	NQ	9.85	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	EPA:901.1	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Cs-137	0.032	pCi/g	0.0255	0.0925	U	R5	10.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	EPA:901.1	72-1071	C-2 Class 2 South 2	1771703.82	1652382	Cs-137	0.405	pCi/g	0.0318	0.0434	NQ	NQ	8.86	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	EPA:901.1	72-1072	C-2 Class 2 South 2	1771683.4	1652501	Cs-137	2.28	pCi/g	0.0677	0.0789	NQ	NQ	12.3	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	EPA:901.1	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Cs-137	0.283	pCi/g	0.0501	0.102	NQ	NQ	11.9	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	EPA:901.1	72-1074	C-2 Class 2 South 2	1771728.39	1652892	Cs-137	0.456	pCi/g	0.0386	0.0551	NQ	NQ	4.79	SD		Y	GELC	23-Dec-14	05-Dec-14	SED	SED

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	EPA:901.1	72-1075	C-2 Class 2 South 2	1771748.62	1652801	Cs-137	0.278	pCi/g	0.0305	0.073	NQ	NQ	9.52	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	EPA:906.0	72-1060	C-2 Class 2 South 2	1771571.1	1651596	H-3	0.38709	pCi/g	0.0131415	0.0245439	NQ	NQ	12.3	SD		Y	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	EPA:906.0	72-1064	C-2 Class 2 South 2	1771569.81	1651495	H-3	0.03586	pCi/g	0.00268052	0.00685429	NQ	NQ	3.92	SD		Y	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	EPA:906.0	72-1065	C-2 Class 2 South 2	1771566.44	1651781	H-3	0.02815	pCi/g	0.00529508	0.0161639	NQ	NQ	8.5	SD		Y	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	EPA:906.0	72-1066	C-2 Class 2 South 2	1771474.25	1651899	H-3	0.01586	pCi/g	0.0083343	0.0273047	U	R5	13.7	SD	U	N	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	EPA:906.0	72-1068	C-2 Class 2 South 2	1771475.54	1652000	H-3	0.0278	pCi/g	0.00450194	0.0134268	NQ	NQ	7.32	SD		Y	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	EPA:906.0	72-1069	C-2 Class 2 South 2	1771580.11	1652301	H-3	0.02753	pCi/g	0.00594387	0.0183561	NQ	NQ	9.85	SD		Y	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	EPA:906.0	72-1070	C-2 Class 2 South 2	1771581.4	1652401	H-3	0.04102	pCi/g	0.0067821	0.0202752	NQ	NQ	10.6	SD		Y	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	EPA:906.0	72-1071	C-2 Class 2 South 2	1771703.82	1652382	H-3	0.0208	pCi/g	0.00540505	0.0170123	NQ	NQ	8.86	SD		Y	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	EPA:906.0	72-1072	C-2 Class 2 South 2	1771683.4	1652501	H-3	0.19074	pCi/g	0.0103505	0.0239829	NQ	NQ	12.3	SD		Y	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	EPA:906.0	72-1073	C-2 Class 2 South 2	1771684.69	1652602	H-3	0.01131	pCi/g	0.00821249	0.0272849	U	R5	11.9	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	EPA:906.0	72-1074	C-2 Class 2 South 2	1771728.39	1652892	H-3	0.06138	pCi/g	0.00365249	0.0087036	NQ	NQ	4.79	SD		Y	GELC	06-Jan-15	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	EPA:906.0	72-1075	C-2 Class 2 South 2	1771748.62	1652801	H-3	0.12836	pCi/g	0.00845942	0.0214642	NQ	NQ	9.52	SD		Y	GELC	04-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	EPA:901.1	72-1060	C-2 Class 2 South 2	1771571.1	1651596	Na-22	-0.0362	pCi/g	0.0223	0.0603	U	R5	12.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	EPA:901.1	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Na-22	0.0156	pCi/g	0.0325	0.12	U	R5	3.92	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	EPA:901.1	72-1065	C-2 Class 2 South 2	1771566.44	1651781	Na-22	-0.00032	pCi/g	0.0273	0.0834	U	R5	8.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	EPA:901.1	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Na-22	0.00979	pCi/g	0.0287	0.103	U	R5	13.7	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	EPA:901.1	72-1068	C-2 Class 2 South 2	1771475.54	1652000	Na-22	-0.00862	pCi/g	0.024	0.0823	U	R5	7.32	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	EPA:901.1	72-1069	C-2 Class 2 South 2	1771580.11	1652301	Na-22	-0.0593	pCi/g	0.0266	0.0738	U	R5	9.85	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	EPA:901.1	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Na-22	-0.0182	pCi/g	0.0283	0.0963	U	R5	10.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	EPA:901.1	72-1071	C-2 Class 2 South 2	1771703.82	1652382	Na-22	-0.0288	pCi/g	0.0191	0.0645	U	R5	8.86	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	EPA:901.1	72-1072	C-2 Class 2 South 2	1771683.4	1652501	Na-22	-0.029	pCi/g	0.0232	0.0785	U	R5	12.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	EPA:901.1	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Na-22	-0.00868	pCi/g	0.0355	0.125	U	R5	11.9	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	EPA:901.1	72-1074	C-2 Class 2 South 2	1771728.39	1652892	Na-22	0.0155	pCi/g	0.0199	0.0731	U	R5	4.79	SD	U	N	GELC	23-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	EPA:901.1	72-1075	C-2 Class 2 South 2	1771748.62	1652801	Na-22	0.0205	pCi/g	0.0297	0.0908	U	R5	9.52	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	HASL-300:ISOPU	72-1060	C-2 Class 2 South 2	1771571.1	1651596	Pu-238	0.00026	pCi/g	0.00699	0.0345	U	R5	12.3	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	HASL-300:ISOPU	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Pu-238	0.0312	pCi/g	0.00652	0.0144	NQ	NQ	3.92	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	HASL-300:ISOPU	72-1065	C-2 Class 2 South 2	1771566.44	1651781	Pu-238	0.024	pCi/g	0.00658	0.0175	NQ	NQ	8.5	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	HASL-300:ISOPU	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Pu-238	0.0054	pCi/g	0.00271	0.0142	U	R5	13.7	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	HASL-300:ISOPU	72-1068	C-2 Class 2 South 2	1771475.54	1652000	Pu-238	0.0401	pCi/g	0.00813	0.0161	NQ	NQ	7.32	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	HASL-300:ISOPU	72-1069	C-2 Class 2 South 2	1771580.11	1652301	Pu-238	0.00147	pCi/g	0.00441	0.0208	U	R5	9.85	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	HASL-300:ISOPU	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Pu-238	0.00012	pCi/g	0.00317	0.0156	U	R5	10.6	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	HASL-300:ISOPU	72-1071	C-2 Class 2 South 2	1771703.82	1652382	Pu-238	-0.00101	pCi/g	0.00348	0.0181	U	R5	8.86	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	HASL-300:ISOPU	72-1072	C-2 Class 2 South 2	1771683.4	1652501	Pu-238	0.00595	pCi/g	0.00673	0.0255	U	R5	12.3	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	HASL-300:ISOPU	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Pu-238	0.00174	pCi/g	0.00519	0.0245	U	R5	11.9	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	HASL-300:ISOPU	72-1074	C-2 Class 2 South 2	1771728.39	1652892	Pu-238	0.00431	pCi/g	0.00382	0.0117	U	R5	4.79	SD	U	N	GELC	03-Jan-15	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	HASL-300:ISOPU	72-1075	C-2 Class 2 South 2	1771748.62	1652801	Pu-238	-0.00144	pCi/g	0.00226	0.0157	U	R5	9.52	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	HASL-300:ISOPU	72-1060	C-2 Class 2 South 2	1771571.1	1651596	Pu-239/240	0.139	pCi/g	0.0192	0.0334	J	R10	12.3	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	HASL-300:ISOPU	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Pu-239/240	1.01	pCi/g	0.0306	0.0139	NQ	NQ	3.92	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	HASL-300:ISOPU	72-1065	C-2 Class 2 South 2	1771566.44	1651781	Pu-239/240	0.295	pCi/g	0.0185	0.0169	NQ	NQ	8.5	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	HASL-300:ISOPU	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Pu-239/240	0.72	pCi/g	0.0257	0.0137	NQ	NQ	13.7	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	HASL-300:ISOPU	72-1068	C-2 Class 2 South 2	1771475.54	1652000	Pu-239/240	0.775	pCi/g	0.0284	0.0156	NQ	NQ	7.32	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	HASL-300:ISOPU	72-1069	C-2 Class 2 South 2	1771580.11	1652301	Pu-239/240	0.0316	pCi/g	0.00684	0.0201	NQ	NQ	9.85	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	HASL-300:ISOPU	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Pu-239/240	0.011	pCi/g	0.00456	0.0151	U	R5	10.6	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	HASL-300:ISOPU	72-1071	C-2 Class 2 South 2	1771703.82	1652382	Pu-239/240	0.0516	pCi/g	0.0085	0.0175	NQ	NQ	8.86	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	HASL-300:ISOPU	72-1072	C-2 Class 2 South 2	1771683.4	1652501	Pu-239/240	0.511	pCi/g	0.0292	0.0247	NQ	NQ	12.3	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	HASL-300:ISOPU	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Pu-239/240	0.0334	pCi/g	0.00822	0.0237	NQ	NQ	11.9	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	HASL-300:ISOPU	72-1074	C-2 Class 2 South 2	1771728.39	1652892	Pu-239/240	0.109	pCi/g	0.00961	0.0114	NQ	NQ	4.79	SD		Y	GELC	03-Jan-15	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	HASL-300:ISOPU	72-1075	C-2 Class 2 South 2	1771748.62	1652801	Pu-239/240	0.0326	pCi/g	0.00678	0.0152	NQ	NQ	9.52	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	EPA:905.0	72-1060	C-2 Class 2 South 2	1771571.1	1651596	Sr-90	0.206	pCi/g	0.072	0.217	U	R5	12.3	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	EPA:905.0	72-1064	C-2 Class 2 South 2	1771569.81	1651495	Sr-90	0.5	pCi/g	0.105	0.267	NQ	NQ	3.92	SD		Y	GELC	07-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	EPA:905.0	72-1065	C-2 Class 2 South 2	1771566.44	1651781	Sr-90	-0.0293	pCi/g	0.0682	0.25	U	R5	8.5	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	EPA:905.0	72-1066	C-2 Class 2 South 2	1771474.25	1651899	Sr-90	0.116	pCi/g	0.0503	0.156	U	R5	13.7	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	EPA:905.0	72-1068	C-2 Class 2 South 2	1771475.54	1652000	Sr-90	0.138	pCi/g	0.0795	0.26	U	R5	7.32	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	EPA:905.0	72-1069	C-2 Class 2 South 2	1771580.11	1652301	Sr-90	-0.00544	pCi/g	0.0452	0.172	U	R5	9.85	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	EPA:905.0	72-1070	C-2 Class 2 South 2	1771581.4	1652401	Sr-90	-0.0374	pCi/g	0.0408	0.166	U	R5	10.6	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	EPA:905.0	72-1071	C-2 Class 2 South 2	1771703.82	1652382	Sr-90	0.00152	pCi/g	0.0504	0.188	U	R5	8.86	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	EPA:905.0	72-1072	C-2 Class 2 South 2	1771683.4	1652501	Sr-90	0.249	pCi/g	0.139	0.455	U	R5	12.3	SD	U	N	GELC	07-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	EPA:905.0	72-1073	C-2 Class 2 South 2	1771684.69	1652602	Sr-90	0.0567	pCi/g	0.0483	0.165	U	R5	11.9	SD	U	N	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	EPA:905.0	72-1074	C-2 Class 2 South 2	1771728.39	1652892	Sr-90	-0.018	pCi/g	0.0399	0.156	U	R5	4.79	SD	U	N	GELC	06-Jan-15	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	EPA:905.0	72-1075	C-2 Class 2 South 2	1771748.62	1652801	Sr-90	1.46	pCi/g	0.193	0.483	NQ	NQ	9.52	SD		Y	GELC	07-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	HASL-300:ISOU	72-1060	C-2 Class 2 South 2	1771571.1	1651596	U-234	1.2	pCi/g	0.0739	0.102	NQ	NQ	12.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	HASL-300:ISOU	72-1064	C-2 Class 2 South 2	1771569.81	1651495	U-234	1.44	pCi/g	0.0843	0.116	NQ	NQ	3.92	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	HASL-300:ISOU	72-1065	C-2 Class 2 South 2	1771566.44	1651781	U-234	1.4	pCi/g	0.0802	0.107	NQ	NQ	8.5	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	HASL-300:ISOU	72-1066	C-2 Class 2 South 2	1771474.25	1651899	U-234	1.49	pCi/g	0.0806	0.0931	NQ	NQ	13.7	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	HASL-300:ISOU	72-1068	C-2 Class 2 South 2	1771475.54	1652000	U-234	1.41	pCi/g	0.0729	0.0874	NQ	NQ	7.32	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	HASL-300:ISOU	72-1069	C-2 Class 2 South 2	1771580.11	1652301	U-234	1.31	pCi/g	0.0735	0.0952	NQ	NQ	9.85	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	HASL-300:ISOU	72-1070	C-2 Class 2 South 2	1771581.4	1652401	U-234	1.15	pCi/g	0.0636	0.0825	NQ	NQ	10.6	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	HASL-300:ISOU	72-1071	C-2 Class 2 South 2	1771703.82	1652382	U-234	1.22	pCi/g	0.0663	0.0839	NQ	NQ	8.86	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	HASL-300:ISOU	72-1072	C-2 Class 2 South 2	1771683.4	1652501	U-234	1.25	pCi/g	0.0768	0.109	NQ	NQ	12.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	HASL-300:ISOU	72-1073	C-2 Class 2 South 2	1771684.69	1652602	U-234	1.33	pCi/g	0.0734	0.0937	NQ	NQ	11.9	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	HASL-300:ISOU	72-1074	C-2 Class 2 South 2	1771728.39	1652892	U-234	0.959	pCi/g	0.0535	0.0677	NQ	NQ	4.79	SD		Y	GELC	24-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	HASL-300:ISOU	72-1075	C-2 Class 2 South 2	1771748.62	1652801	U-234	1.16	pCi/g	0.0612	0.0754	NQ	NQ	9.52	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	HASL-300:ISOU	72-1060	C-2 Class 2 South 2	1771571.1	1651596	U-235/236	0.09	pCi/g	0.0231	0.077	NQ	NQ	12.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	HASL-300:ISOU	72-1064	C-2 Class 2 South 2	1771569.81	1651495	U-235/236	0.0602	pCi/g	0.0225	0.0875	U	R5	3.92	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	HASL-300:ISOU	72-1065	C-2 Class 2 South 2	1771566.44	1651781	U-235/236	0.0832	pCi/g	0.0254	0.0806	NQ	NQ	8.5	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	HASL-300:ISOU	72-1066	C-2 Class 2 South 2	1771474.25	1651899	U-235/236	0.0919	pCi/g	0.0242	0.0704	NQ	NQ	13.7	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	HASL-300:ISOU	72-1068	C-2 Class 2 South 2	1771475.54	1652000	U-235/236	0.0863	pCi/g	0.0218	0.0661	NQ	NQ	7.32	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	HASL-300:ISOU	72-1069	C-2 Class 2 South 2	1771580.11	1652301	U-235/236	0.109	pCi/g	0.0242	0.072	NQ	NQ	9.85	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	HASL-300:ISOU	72-1070	C-2 Class 2 South 2	1771581.4	1652401	U-235/236	0.0643	pCi/g	0.0187	0.0624	NQ	NQ	10.6	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	HASL-300:ISOU	72-1071	C-2 Class 2 South 2	1771703.82	1652382	U-235/236	0.0393	pCi/g	0.0169	0.0634	U	R5	8.86	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	HASL-300:ISOU	72-1072	C-2 Class 2 South 2	1771683.4	1652501	U-235/236	0.0568	pCi/g	0.0197	0.0826	U	R5	12.3	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	HASL-300:ISOU	72-1073	C-2 Class 2 South 2	1771684.69	1652602	U-235/236	0.0877	pCi/g	0.0229	0.0709	NQ	NQ	11.9	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	HASL-300:ISOU	72-1074	C-2 Class 2 South 2	1771728.39	1652892	U-235/236	0.0457	pCi/g	0.0153	0.0512	U	R5	4.79	SD	U	N	GELC	24-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	HASL-300:ISOU	72-1075	C-2 Class 2 South 2	1771748.62	1652801	U-235/236	0.0666	pCi/g	0.018	0.057	NQ	NQ	9.52	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91172	HASL-300:ISOU	72-1060	C-2 Class 2 South 2	1771571.1	1651596	U-238	1.37	pCi/g	0.0773	0.0566	NQ	NQ	12.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91176	HASL-300:ISOU	72-1064	C-2 Class 2 South 2	1771569.81	1651495	U-238	1.22	pCi/g	0.0781	0.0644	NQ	NQ	3.92	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91177	HASL-300:ISOU	72-1065	C-2 Class 2 South 2	1771566.44	1651781	U-238	1.28	pCi/g	0.0773	0.0593	NQ	NQ	8.5	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91178	HASL-300:ISOU	72-1066	C-2 Class 2 South 2	1771474.25	1651899	U-238	1.71	pCi/g	0.0827	0.0517	NQ	NQ	13.7	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91180	HASL-300:ISOU	72-1068	C-2 Class 2 South 2	1771475.54	1652000	U-238	1.29	pCi/g	0.0693	0.0486	NQ	NQ	7.32	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91181	HASL-300:ISOU	72-1069	C-2 Class 2 South 2	1771580.11	1652301	U-238	1.32	pCi/g	0.0734	0.0529	NQ	NQ	9.85	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91182	HASL-300:ISOU	72-1070	C-2 Class 2 South 2	1771581.4	1652401	U-238	1.14	pCi/g	0.0633	0.0459	NQ	NQ	10.6	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91183	HASL-300:ISOU	72-1071	C-2 Class 2 South 2	1771703.82	1652382	U-238	1.18	pCi/g	0.0657	0.0467	NQ	NQ	8.86	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91184	HASL-300:ISOU	72-1072	C-2 Class 2 South 2	1771683.4	1652501	U-238	1.2	pCi/g	0.0752	0.0608	NQ	NQ	12.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91185	HASL-300:ISOU	72-1073	C-2 Class 2 South 2	1771684.69	1652602	U-238	1.26	pCi/g	0.0712	0.0521	NQ	NQ	11.9	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91186	HASL-300:ISOU	72-1074	C-2 Class 2 South 2	1771728.39	1652892	U-238	0.962	pCi/g	0.0529	0.0376	NQ	NQ	4.79	SD		Y	GELC	24-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91187	HASL-300:ISOU	72-1075	C-2 Class 2 South 2	1771748.62	1652801	U-238	1.2	pCi/g	0.0621	0.0419	NQ	NQ	9.52	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	HASL-300:AM-241	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Am-241	0.00573	pCi/g	0.00351	0.0238	U	R5	8.12	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	HASL-300:AM-241	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Am-241	-0.00147	pCi/g	0.00441	0.0244	U	R5	2.6	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	HASL-300:AM-241	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Am-241	0.0101	pCi/g	0.0101	0.0559	U	R5	6.02	SD	U	N	GELC	26-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	HASL-300:AM-241	72-1067	C-2 Class 3 Construction	1771331.77	1651043	Am-241	0.0054	pCi/g	0.00505	0.0224	U	R5	11.6	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	HASL-300:AM-241	72-1077	C-2 Class 3 Construction	1771668.38	1652263	Am-241	0.00484	pCi/g	0.00774	0.0268	U	R5	10.6	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	HASL-300:AM-241	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Am-241	0.00139	pCi/g	0.00311	0.0231	U	R5	10.5	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	HASL-300:AM-241	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Am-241	0.00853	pCi/g	0.0045	0.0236	U	R5	9.44	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	HASL-300:AM-241	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Am-241	0	pCi/g	0.00469	0.0246	U	R5	16.4	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	HASL-300:AM-241	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Am-241	0.0986	pCi/g	0.0121	0.0234	NQ	NQ	11.3	SD		Y	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	HASL-300:AM-241	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Am-241	0.003	pCi/g	0.00367	0.0249	U	R5	10.8	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	HASL-300:AM-241	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Am-241	0.00604	pCi/g	0.00565	0.0251	U	R5	9.4	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	EPA:901.1	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Co-60	0.0158	pCi/g	0.0268	0.0971	U	R5	8.12	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	EPA:901.1	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Co-60	-0.0167	pCi/g	0.0291	0.0886	U	R5	2.6	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	EPA:901.1	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Co-60	0.0221	pCi/g	0.0218	0.102	U	R5	6.02	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	EPA:901.1	72-1067	C-2 Class 3 Construction	1771331.77	1651043	Co-60	-0.00824	pCi/g	0.0158	0.0555	U	R5	11.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	EPA:901.1	72-1077	C-2 Class 3 Construction	1771668.38	1652263	Co-60	-0.00422	pCi/g	0.0166	0.0579	U	R5	10.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	EPA:901.1	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Co-60	0.0225	pCi/g	0.0235	0.0877	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	EPA:901.1	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Co-60	-0.0164	pCi/g	0.0323	0.114	U	R5	9.44	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	EPA:901.1	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Co-60	0.0145	pCi/g	0.0209	0.077	U	R5	16.4	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	EPA:901.1	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Co-60	0.00902	pCi/g	0.018	0.0692	U	R5	11.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	EPA:901.1	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Co-60	0.0187	pCi/g	0.0346	0.089	U	R5	10.8	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	EPA:901.1	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Co-60	0.00969	pCi/g	0.0148	0.0558	U	R5	9.4	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	EPA:901.1	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Cs-134	0.064	pCi/g	0.0331	0.128	U	R5	8.12	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	EPA:901.1	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Cs-134	0.0771	pCi/g	0.0476	0.118	U	R5	2.6	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	EPA:901.1	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Cs-134	0.0585	pCi/g	0.0287	0.103	U	R5	6.02	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	EPA:901.1	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Cs-134	0.0559	pCi/g	0.0396	0.0932	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	EPA:901.1	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Cs-134	0.0765	pCi/g	0.0317	0.124	U	R5	9.44	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	EPA:901.1	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Cs-134	0.0911	pCi/g	0.0285	0.0917	U	R5	16.4	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	EPA:901.1	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Cs-134	0.0493	pCi/g	0.0268	0.091	U	R5	11.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	EPA:901.1	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Cs-134	0.0751	pCi/g	0.0396	0.109	U	R5	10.8	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	EPA:901.1	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Cs-134	0.0532	pCi/g	0.0254	0.0659	U	R5	9.4	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	EPA:901.1	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Cs-137	0.0428	pCi/g	0.0315	0.111	U	R5	8.12	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	EPA:901.1	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Cs-137	0.127	pCi/g	0.0404	0.0906	NQ	NQ	2.6	SD		Y	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	EPA:901.1	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Cs-137	0.0544	pCi/g	0.0226	0.0942	U	R5	6.02	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	EPA:901.1	72-1067	C-2 Class 3 Construction	1771331.77	1651043	Cs-137	0.227	pCi/g	0.025	0.0521	NQ	NQ	11.6	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	EPA:901.1	72-1077	C-2 Class 3 Construction	1771668.38	1652263	Cs-137	0.158	pCi/g	0.022	0.0569	J	R10	10.6	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	EPA:901.1	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Cs-137	0.116	pCi/g	0.0425	0.0703	U	R11	10.5	SD		N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	EPA:901.1	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Cs-137	0.104	pCi/g	0.039	0.112	U	R5	9.44	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	EPA:901.1	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Cs-137	-0.0328	pCi/g	0.0206	0.0703	U	R5	16.4	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	EPA:901.1	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Cs-137	0.191	pCi/g	0.029	0.0771	NQ	NQ	11.3	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	EPA:901.1	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Cs-137	0.049	pCi/g	0.0515	0.077	U	R5	10.8	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	EPA:901.1	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Cs-137	0.033	pCi/g	0.027	0.0523	U	R5	9.4	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	EPA:906.0	72-1018	C-2 Class 3 Construction	1771680.84	1650050	H-3	0.02855	pCi/g	0.0050993	0.0154658	NQ	NQ	8.12	SD		Y	GELC	31-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	EPA:906.0	72-1019	C-2 Class 3 Construction	1771968.48	1650627	H-3	0.11879	pCi/g	0.00298973	0.00456468	NQ	NQ	2.6	SD		Y	GELC	26-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	EPA:906.0	72-1032	C-2 Class 3 Construction	1772091.12	1651849	H-3	0.06854	pCi/g	0.00497076	0.0128753	NQ	NQ	6.02	SD		Y	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	EPA:906.0	72-1067	C-2 Class 3 Construction	1771331.77	1651043	H-3	0.01876	pCi/g	0.00801765	0.0261131	U	R5	11.6	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	EPA:906.0	72-1077	C-2 Class 3 Construction	1771668.38	1652263	H-3	0.58336	pCi/g	0.0150582	0.0256107	NQ	NQ	10.6	SD		Y	GELC	27-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	EPA:906.0	72-1078	C-2 Class 3 Construction	1771153.84	1654168	H-3	0.04106	pCi/g	0.00786034	0.0241676	NQ	NQ	10.5	SD		Y	GELC	27-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	EPA:906.0	72-1083	C-2 Class 3 Construction	1771285.28	1654368	H-3	0.02158	pCi/g	0.00666095	0.021265	NQ	NQ	9.44	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	EPA:906.0	72-1084	C-2 Class 3 Construction	1771513.4	1653580	H-3	0.01911	pCi/g	0.0124569	0.0411962	U	R5	16.4	SD	U	N	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	EPA:906.0	72-1085	C-2 Class 3 Construction	1771901.41	1651890	H-3	-0.788	pCi/g	1.22	4.98	U	R5	11.3	SD	U	N	GELC	29-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	EPA:906.0	72-1086	C-2 Class 3 Construction	1771798.84	1651295	H-3	0.10836	pCi/g	0.00949238	0.0260314	NQ	NQ	10.8	SD		Y	GELC	28-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	EPA:906.0	72-1087	C-2 Class 3 Construction	1770886.6	1650269	H-3	0.11828	pCi/g	0.00730419	0.0175342	NQ	NQ	9.4	SD		Y	GELC	03-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	EPA:901.1	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Na-22	0.0809	pCi/g	0.0263	0.103	U	R5	8.12	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	EPA:901.1	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Na-22	0.00415	pCi/g	0.0305	0.114	U	R5	2.6	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	EPA:901.1	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Na-22	0.02	pCi/g	0.0249	0.1	U	R5	6.02	SD	U	N	GELC	19-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	EPA:901.1	72-1067	C-2 Class 3 Construction	1771331.77	1651043	Na-22	-0.0425	pCi/g	0.0193	0.061	U	R5	11.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	EPA:901.1	72-1077	C-2 Class 3 Construction	1771668.38	1652263	Na-22	-0.0238	pCi/g	0.0203	0.0679	U	R5	10.6	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	EPA:901.1	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Na-22	-0.0034	pCi/g	0.0245	0.0865	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	EPA:901.1	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Na-22	0.0417	pCi/g	0.033	0.126	U	R5	9.44	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	EPA:901.1	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Na-22	0.0114	pCi/g	0.0254	0.0904	U	R5	16.4	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	EPA:901.1	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Na-22	0.00686	pCi/g	0.0246	0.0869	U	R5	11.3	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	EPA:901.1	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Na-22	-0.0397	pCi/g	0.0261	0.0843	U	R5	10.8	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	EPA:901.1	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Na-22	0.0235	pCi/g	0.017	0.065	U	R5	9.4	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	HASL-300:ISOPU	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Pu-238	0.00166	pCi/g	0.00498	0.0242	U	R5	8.12	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	HASL-300:ISOPU	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Pu-238	0.00504	pCi/g	0.00504	0.0245	U	R5	2.6	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	HASL-300:ISOPU	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Pu-238	-0.00132	pCi/g	0.0035	0.0193	U	R5	6.02	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	HASL-300:ISOPU	72-1067	C-2 Class 3 Construction	1771331.77	1651043	Pu-238	0.00327	pCi/g	0.00218	0.0129	U	R5	11.6	SD	U	N	GELC	03-Jan-15	05-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	HASL-300:ISOPU	72-1077	C-2 Class 3 Construction	1771668.38	1652263	Pu-238	-0.00506	pCi/g	0.00506	0.0184	U	R5	10.6	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	HASL-300:ISOPU	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Pu-238	0.00144	pCi/g	0.00432	0.021	U	R5	10.5	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	HASL-300:ISOPU	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Pu-238	0.0091	pCi/g	0.00546	0.0265	U	R5	9.44	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	HASL-300:ISOPU	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Pu-238	0	pCi/g	0.00289	0.0297	U	R5	16.4	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	HASL-300:ISOPU	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Pu-238	0.00604	pCi/g	0.00533	0.0293	U	R5	11.3	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	HASL-300:ISOPU	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Pu-238	-0.0115	pCi/g	0.00609	0.0335	U	R5	10.8	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	HASL-300:ISOPU	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Pu-238	0	pCi/g	0.00683	0.0287	U	R5	9.4	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	HASL-300:ISOPU	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Pu-239/240	0.0083	pCi/g	0.00439	0.0234	U	R5	8.12	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	HASL-300:ISOPU	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Pu-239/240	0.00672	pCi/g	0.00672	0.0237	U	R5	2.6	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	HASL-300:ISOPU	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Pu-239/240	0.0384	pCi/g	0.00868	0.0187	NQ	NQ	6.02	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	HASL-300:ISOPU	72-1067	C-2 Class 3 Construction	1771331.77	1651043	Pu-239/240	0.0178	pCi/g	0.00533	0.0125	NQ	NQ	11.6	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	HASL-300:ISOPU	72-1077	C-2 Class 3 Construction	1771668.38	1652263	Pu-239/240	0.0228	pCi/g	0.00645	0.0178	NQ	NQ	10.6	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	HASL-300:ISOPU	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Pu-239/240	0.0144	pCi/g	0.00675	0.0203	U	R5	10.5	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	HASL-300:ISOPU	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Pu-239/240	0.00909	pCi/g	0.00704	0.0256	U	R5	9.44	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	HASL-300:ISOPU	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Pu-239/240	0.0184	pCi/g	0.0131	0.0288	U	R5	16.4	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	HASL-300:ISOPU	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Pu-239/240	1.69	pCi/g	0.0585	0.0284	NQ	NQ	11.3	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	HASL-300:ISOPU	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Pu-239/240	0.0023	pCi/g	0.0083	0.0325	U	R5	10.8	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	HASL-300:ISOPU	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Pu-239/240	0.0473	pCi/g	0.0131	0.0278	J	R10	9.4	SD		Y	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	EPA:905.0	72-1018	C-2 Class 3 Construction	1771680.84	1650050	Sr-90	-0.028	pCi/g	0.0538	0.211	U	R5	8.12	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	EPA:905.0	72-1019	C-2 Class 3 Construction	1771968.48	1650627	Sr-90	0.0459	pCi/g	0.0487	0.17	U	R5	2.6	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	EPA:905.0	72-1032	C-2 Class 3 Construction	1772091.12	1651849	Sr-90	0.0762	pCi/g	0.0854	0.301	U	R5	6.02	SD	U	N	GELC	31-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	EPA:905.0	72-1067	C-2 Class 3 Construction	1771331.77	1651043	Sr-90	0.0669	pCi/g	0.0399	0.131	U	R5	11.6	SD	U	N	GELC	06-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	EPA:905.0	72-1077	C-2 Class 3 Construction	1771668.38	1652263	Sr-90	0.0802	pCi/g	0.0511	0.17	U	R5	10.6	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	EPA:905.0	72-1078	C-2 Class 3 Construction	1771153.84	1654168	Sr-90	0.162	pCi/g	0.0617	0.188	U	R5	10.5	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	EPA:905.0	72-1083	C-2 Class 3 Construction	1771285.28	1654368	Sr-90	-0.0498	pCi/g	0.0371	0.164	U	R5	9.44	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	EPA:905.0	72-1084	C-2 Class 3 Construction	1771513.4	1653580	Sr-90	0.116	pCi/g	0.0556	0.175	U	R5	16.4	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	EPA:905.0	72-1085	C-2 Class 3 Construction	1771901.41	1651890	Sr-90	0.121	pCi/g	0.0631	0.204	U	R5	11.3	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	EPA:905.0	72-1086	C-2 Class 3 Construction	1771798.84	1651295	Sr-90	0.207	pCi/g	0.0949	0.301	U	R5	10.8	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	EPA:905.0	72-1087	C-2 Class 3 Construction	1770886.6	1650269	Sr-90	-0.127	pCi/g	0.0693	0.281	U	R5	9.4	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	HASL-300:ISOU	72-1018	C-2 Class 3 Construction	1771680.84	1650050	U-234	1.91	pCi/g	0.0838	0.086	NQ	NQ	8.12	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	HASL-300:ISOU	72-1019	C-2 Class 3 Construction	1771968.48	1650627	U-234	1.57	pCi/g	0.103	0.157	NQ	NQ	2.6	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	HASL-300:ISOU	72-1032	C-2 Class 3 Construction	1772091.12	1651849	U-234	1.3	pCi/g	0.089	0.138	NQ	NQ	6.02	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	HASL-300:ISOU	72-1067	C-2 Class 3 Construction	1771331.77	1651043	U-234	1.32	pCi/g	0.0725	0.0929	NQ	NQ	11.6	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	HASL-300:ISOU	72-1077	C-2 Class 3 Construction	1771668.38	1652263	U-234	1.32	pCi/g	0.0876	0.134	NQ	NQ	10.6	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	HASL-300:ISOU	72-1078	C-2 Class 3 Construction	1771153.84	1654168	U-234	1.13	pCi/g	0.0736	0.0987	NQ	NQ	10.5	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	HASL-300:ISOU	72-1083	C-2 Class 3 Construction	1771285.28	1654368	U-234	1.58	pCi/g	0.0773	0.0885	NQ	NQ	9.44	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	HASL-300:ISOU	72-1084	C-2 Class 3 Construction	1771513.4	1653580	U-234	2.15	pCi/g	0.11	0.128	NQ	NQ	16.4	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	HASL-300:ISOU	72-1085	C-2 Class 3 Construction	1771901.41	1651890	U-234	1.12	pCi/g	0.0708	0.104	NQ	NQ	11.3	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	HASL-300:ISOU	72-1086	C-2 Class 3 Construction	1771798.84	1651295	U-234	1.32	pCi/g	0.0726	0.0923	NQ	NQ	10.8	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	HASL-300:ISOU	72-1087	C-2 Class 3 Construction	1770886.6	1650269	U-234	0.97	pCi/g	0.0603	0.0864	NQ	NQ	9.4	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	HASL-300:ISOU	72-1018	C-2 Class 3 Construction	1771680.84	1650050	U-235/236	0.107	pCi/g	0.0237	0.065	NQ	NQ	8.12	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	HASL-300:ISOU	72-1019	C-2 Class 3 Construction	1771968.48	1650627	U-235/236	0.0981	pCi/g	0.0306	0.119	U	R5	2.6	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	HASL-300:ISOU	72-1032	C-2 Class 3 Construction	1772091.12	1651849	U-235/236	0.0788	pCi/g	0.0295	0.104	U	R5	6.02	SD	U	N	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	HASL-300:ISOU	72-1067	C-2 Class 3 Construction	1771331.77	1651043	U-235/236	0.0531	pCi/g	0.0174	0.0702	U	R5	11.6	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	HASL-300:ISOU	72-1077	C-2 Class 3 Construction	1771668.38	1652263	U-235/236	0.0903	pCi/g	0.0303	0.101	U	R5	10.6	SD	U	N	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	HASL-300:ISOU	72-1078	C-2 Class 3 Construction	1771153.84	1654168	U-235/236	0.0359	pCi/g	0.0185	0.0746	U	R5	10.5	SD	U	N	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	HASL-300:ISOU	72-1083	C-2 Class 3 Construction	1771285.28	1654368	U-235/236	0.0828	pCi/g	0.0216	0.0669	NQ	NQ	9.44	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	HASL-300:ISOU	72-1084	C-2 Class 3 Construction	1771513.4	1653580	U-235/236	0.206	pCi/g	0.0456	0.0968	NQ	NQ	16.4	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	HASL-300:ISOU	72-1085	C-2 Class 3 Construction	1771901.41	1651890	U-235/236	0.103	pCi/g	0.0248	0.0788	NQ	NQ	11.3	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	HASL-300:ISOU	72-1086	C-2 Class 3 Construction	1771798.84	1651295	U-235/236	0.101	pCi/g	0.024	0.0698	NQ	NQ	10.8	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	HASL-300:ISOU	72-1087	C-2 Class 3 Construction	1770886.6	1650269	U-235/236	0.112	pCi/g	0.0233	0.0653	NQ	NQ	9.4	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91130	HASL-300:ISOU	72-1018	C-2 Class 3 Construction	1771680.84	1650050	U-238	2.07	pCi/g	0.087	0.0478	NQ	NQ	8.12	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91131	HASL-300:ISOU	72-1019	C-2 Class 3 Construction	1771968.48	1650627	U-238	1.35	pCi/g	0.0963	0.0875	NQ	NQ	2.6	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91144	HASL-300:ISOU	72-1032	C-2 Class 3 Construction	1772091.12	1651849	U-238	1.1	pCi/g	0.0812	0.0766	NQ	NQ	6.02	SD		Y	GELC	22-Dec-14	03-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91179	HASL-300:ISOU	72-1067	C-2 Class 3 Construction	1771331.77	1651043	U-238	1.29	pCi/g	0.0715	0.0517	NQ	NQ	11.6	SD		Y	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91189	HASL-300:ISOU	72-1077	C-2 Class 3 Construction	1771668.38	1652263	U-238	1.34	pCi/g	0.0889	0.0743	NQ	NQ	10.6	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91190	HASL-300:ISOU	72-1078	C-2 Class 3 Construction	1771153.84	1654168	U-238	1.12	pCi/g	0.0692	0.0549	NQ	NQ	10.5	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91195	HASL-300:ISOU	72-1083	C-2 Class 3 Construction	1771285.28	1654368	U-238	1.56	pCi/g	0.0764	0.0492	NQ	NQ	9.44	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91196	HASL-300:ISOU	72-1084	C-2 Class 3 Construction	1771513.4	1653580	U-238	1.81	pCi/g	0.1	0.0712	NQ	NQ	16.4	SD		Y	GELC	03-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91197	HASL-300:ISOU	72-1085	C-2 Class 3 Construction	1771901.41	1651890	U-238	1.38	pCi/g	0.0785	0.058	NQ	NQ	11.3	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91198	HASL-300:ISOU	72-1086	C-2 Class 3 Construction	1771798.84	1651295	U-238	1.32	pCi/g	0.0723	0.0513	NQ	NQ	10.8	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91199	HASL-300:ISOU	72-1087	C-2 Class 3 Construction	1770886.6	1650269	U-238	0.948	pCi/g	0.0603	0.048	NQ	NQ	9.4	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	HASL-300:AM-241	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	Am-241	0.0166	pCi/g	0.00784	0.0393	U	R5	7.88	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	HASL-300:AM-241	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Am-241	0.0246	pCi/g	0.0101	0.0341	U	R5	3.09	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	HASL-300:AM-241	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Am-241	0.016	pCi/g	0.00883	0.0379	U	R5	4.86	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	HASL-300:AM-241	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Am-241	-0.00161	pCi/g	0.00701	0.0267	U	R5	4.43	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	HASL-300:AM-241	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Am-241	0.00801	pCi/g	0.00424	0.0266	U	R5	2.67	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	HASL-300:AM-241	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Am-241	0.0105	pCi/g	0.0122	0.0414	U	R5	10.2	SD	U	N	GELC	30-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	HASL-300:AM-241	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Am-241	0.0628	pCi/g	0.0109	0.0261	NQ	NQ	4.99	SD		Y	GELC	26-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	HASL-300:AM-241	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Am-241	0.0128	pCi/g	0.00552	0.0237	U	R5	10.5	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	HASL-300:AM-241	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Am-241	0.00165	pCi/g	0.00548	0.0275	U	R5	12.4	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	HASL-300:AM-241	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Am-241	0.0151	pCi/g	0.00794	0.0417	U	R5	8.7	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	HASL-300:AM-241	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Am-241	0.00583	pCi/g	0.00514	0.0323	U	R5	13	SD	U	N	GELC	26-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	EPA:901.1	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	Co-60	0.0367	pCi/g	0.0281	0.111	U	R5	7.88	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	EPA:901.1	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Co-60	0.01	pCi/g	0.0211	0.0807	U	R5	3.09	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	EPA:901.1	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Co-60	0.00408	pCi/g	0.0223	0.0838	U	R5	4.86	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	EPA:901.1	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Co-60	-0.0157	pCi/g	0.0241	0.0871	U	R5	4.43	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	EPA:901.1	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Co-60	0.0104	pCi/g	0.0317	0.122	U	R5	2.67	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	EPA:901.1	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Co-60	-0.0294	pCi/g	0.0224	0.0739	U	R5	10.2	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	EPA:901.1	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Co-60	0.0299	pCi/g	0.0232	0.0906	U	R5	4.99	SD	U	N	GELC	23-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	EPA:901.1	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Co-60	0.0306	pCi/g	0.0167	0.0607	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	EPA:901.1	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Co-60	0.00353	pCi/g	0.0222	0.0812	U	R5	12.4	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	EPA:901.1	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Co-60	0.0135	pCi/g	0.0176	0.0649	U	R5	8.7	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	EPA:901.1	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Co-60	0.0182	pCi/g	0.0193	0.0712	U	R5	13	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	EPA:901.1	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Cs-134	0.0624	pCi/g	0.0343	0.0992	U	R5	3.09	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	EPA:901.1	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Cs-134	0.0735	pCi/g	0.024	0.0924	U	R5	4.86	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	EPA:901.1	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Cs-134	0.0965	pCi/g	0.0361	0.104	U	R5	4.43	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	EPA:901.1	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Cs-134	0.106	pCi/g	0.0416	0.147	U	R5	2.67	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	EPA:901.1	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Cs-134	0.0753	pCi/g	0.0279	0.104	U	R5	10.2	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	EPA:901.1	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Cs-134	0.0578	pCi/g	0.0296	0.0875	U	R5	4.99	SD	U	N	GELC	23-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	EPA:901.1	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Cs-134	0.0562	pCi/g	0.0196	0.0732	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	EPA:901.1	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Cs-134	0.0767	pCi/g	0.0292	0.096	U	R5	12.4	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	EPA:901.1	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Cs-134	0.0831	pCi/g	0.026	0.0841	U	R5	8.7	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	EPA:901.1	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Cs-134	0.0717	pCi/g	0.0256	0.0812	U	R5	13	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	EPA:901.1	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	Cs-137	0.126	pCi/g	0.0468	0.121	U	R11	7.88	SD		N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	EPA:901.1	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Cs-137	0.543	pCi/g	0.0465	0.0842	NQ	NQ	3.09	SD		Y	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	EPA:901.1	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Cs-137	0.346	pCi/g	0.0419	0.0928	NQ	NQ	4.86	SD		Y	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	EPA:901.1	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Cs-137	0.339	pCi/g	0.0452	0.0886	NQ	NQ	4.43	SD		Y	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	EPA:901.1	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Cs-137	0.0386	pCi/g	0.0466	0.114	U	R5	2.67	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	EPA:901.1	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Cs-137	0.323	pCi/g	0.0348	0.087	NQ	NQ	10.2	SD		Y	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	EPA:901.1	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Cs-137	0.23	pCi/g	0.0275	0.0638	NQ	NQ	4.99	SD		Y	GELC	23-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	EPA:901.1	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Cs-137	0.291	pCi/g	0.0387	0.0643	NQ	NQ	10.5	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	EPA:901.1	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Cs-137	0.283	pCi/g	0.0422	0.0815	NQ	NQ	12.4	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	EPA:901.1	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Cs-137	0.165	pCi/g	0.0347	0.0622	NQ	NQ	8.7	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	EPA:901.1	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Cs-137	0.259	pCi/g	0.0308	0.0695	NQ	NQ	13	SD		Y	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	EPA:906.0	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	H-3	0.00702	pCi/g	0.00550026	0.0183057	U	R5	7.88	SD	U	N	GELC	26-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	EPA:906.0	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	H-3	0.03858	pCi/g	0.00268474	0.00695099	NQ	NQ	3.09	SD		Y	GELC	26-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	EPA:906.0	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	H-3	0.026	pCi/g	0.00374436	0.011136	NQ	NQ	4.86	SD		Y	GELC	27-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	EPA:906.0	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	H-3	0.03263	pCi/g	0.00406056	0.0118665	NQ	NQ	4.43	SD		Y	GELC	27-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	EPA:906.0	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	H-3	0.02469	pCi/g	0.00225769	0.0062546	NQ	NQ	2.67	SD		Y	GELC	27-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	EPA:906.0	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	H-3	0.04271	pCi/g	0.00768975	0.0235122	NQ	NQ	10.2	SD		Y	GELC	27-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	EPA:906.0	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	H-3	1.78	pCi/g	1.37	4.66	U	R5	4.99	SD	U	N	GELC	29-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	EPA:906.0	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	H-3	0.01678	pCi/g	0.00748492	0.0244022	U	R5	10.5	SD	U	N	GELC	27-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	EPA:906.0	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	H-3	0.08323	pCi/g	0.0102909	0.0300091	NQ	NQ	12.4	SD		Y	GELC	27-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	EPA:906.0	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	H-3	0.29635	pCi/g	0.0100055	0.0197251	NQ	NQ	8.7	SD		Y	GELC	27-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	EPA:906.0	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	H-3	0.15092	pCi/g	0.0115356	0.0306322	NQ	NQ	13	SD		Y	GELC	27-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	EPA:901.1	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	Na-22	-0.0139	pCi/g	0.028	0.0978	U	R5	7.88	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	EPA:901.1	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Na-22	0.00566	pCi/g	0.0263	0.0965	U	R5	3.09	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	EPA:901.1	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Na-22	0.0354	pCi/g	0.0165	0.0834	U	R5	4.86	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	EPA:901.1	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Na-22	-0.00197	pCi/g	0.0266	0.0946	U	R5	4.43	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	EPA:901.1	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Na-22	-0.0319	pCi/g	0.0385	0.135	U	R5	2.67	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	EPA:901.1	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Na-22	0.0116	pCi/g	0.0258	0.0948	U	R5	10.2	SD	U	N	GELC	19-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	EPA:901.1	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Na-22	-0.0386	pCi/g	0.0274	0.0941	U	R5	4.99	SD	U	N	GELC	23-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	EPA:901.1	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Na-22	0.0201	pCi/g	0.0207	0.0766	U	R5	10.5	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	EPA:901.1	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Na-22	-0.0197	pCi/g	0.0259	0.0847	U	R5	12.4	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	EPA:901.1	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Na-22	0.0492	pCi/g	0.0228	0.0829	U	R5	8.7	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	EPA:901.1	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Na-22	-0.0229	pCi/g	0.0236	0.07	U	R5	13	SD	U	N	GELC	23-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	HASL-300:ISOPU	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	Pu-238	0.00879	pCi/g	0.00453	0.0183	U	R5	7.88	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	HASL-300:ISOPU	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Pu-238	-0.00381	pCi/g	0.00603	0.0277	U	R5	3.09	SD	U	N	GELC	30-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	HASL-300:ISOPU	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Pu-238	0.0142	pCi/g	0.00464	0.0187	U	R5	4.86	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	HASL-300:ISOPU	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Pu-238	0.00675	pCi/g	0.00487	0.0197	U	R5	4.43	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	HASL-300:ISOPU	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Pu-238	0.0109	pCi/g	0.00435	0.0158	U	R5	2.67	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	HASL-300:ISOPU	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Pu-238	0.0081	pCi/g	0.00448	0.0168	U	R5	10.2	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	HASL-300:ISOPU	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Pu-238	0.0268	pCi/g	0.0109	0.0324	U	R5	4.99	SD	U	N	GELC	24-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	HASL-300:ISOPU	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Pu-238	-0.0029	pCi/g	0.0112	0.0422	U	R5	10.5	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	HASL-300:ISOPU	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Pu-238	0	pCi/g	0.00423	0.0251	U	R5	12.4	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	HASL-300:ISOPU	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Pu-238	0.00542	pCi/g	0.00404	0.0263	U	R5	8.7	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	HASL-300:ISOPU	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Pu-238	0.00177	pCi/g	0.00531	0.0258	U	R5	13	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	HASL-300:ISOPU	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	Pu-239/240	0.0176	pCi/g	0.00502	0.0177	U	R5	7.88	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	HASL-300:ISOPU	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Pu-239/240	0.0705	pCi/g	0.0131	0.0268	NQ	NQ	3.09	SD		Y	GELC	30-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	HASL-300:ISOPU	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Pu-239/240	0.0245	pCi/g	0.0059	0.0182	NQ	NQ	4.86	SD		Y	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	HASL-300:ISOPU	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Pu-239/240	0.023	pCi/g	0.00702	0.019	NQ	NQ	4.43	SD		Y	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	HASL-300:ISOPU	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Pu-239/240	0.0141	pCi/g	0.00474	0.0153	U	R5	2.67	SD	U	N	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	HASL-300:ISOPU	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Pu-239/240	0.0197	pCi/g	0.00555	0.0163	NQ	NQ	10.2	SD		Y	GELC	17-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	HASL-300:ISOPU	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Pu-239/240	0.448	pCi/g	0.0334	0.0314	NQ	NQ	4.99	SD		Y	GELC	24-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	HASL-300:ISOPU	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Pu-239/240	0.0145	pCi/g	0.0151	0.0409	U	R5	10.5	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	HASL-300:ISOPU	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Pu-239/240	0.0224	pCi/g	0.00828	0.0243	U	R5	12.4	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	HASL-300:ISOPU	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Pu-239/240	0.0108	pCi/g	0.00626	0.0255	U	R5	8.7	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	HASL-300:ISOPU	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Pu-239/240	0.0106	pCi/g	0.00708	0.0249	U	R5	13	SD	U	N	GELC	24-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	EPA:905.0	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	Sr-90	0.0986	pCi/g	0.0323	0.104	U	R5	7.88	SD	U	N	GELC	29-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	EPA:905.0	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	Sr-90	0.128	pCi/g	0.0294	0.0923	NQ	NQ	3.09	SD		Y	GELC	29-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	EPA:905.0	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	Sr-90	0.0928	pCi/g	0.0293	0.0935	U	R5	4.86	SD	U	N	GELC	29-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	EPA:905.0	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	Sr-90	0.00183	pCi/g	0.0472	0.177	U	R5	4.43	SD	U	N	GELC	31-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	EPA:905.0	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	Sr-90	0.0247	pCi/g	0.0321	0.108	U	R5	2.67	SD	U	N	GELC	29-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	EPA:905.0	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	Sr-90	-0.0728	pCi/g	0.0521	0.179	U	R5	10.2	SD	U	N	GELC	29-Dec-14	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	EPA:905.0	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	Sr-90	-0.00392	pCi/g	0.0554	0.208	U	R5	4.99	SD	U	N	GELC	05-Jan-15	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	EPA:905.0	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	Sr-90	0.291	pCi/g	0.102	0.319	U	R5	10.5	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	EPA:905.0	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	Sr-90	0.102	pCi/g	0.0617	0.204	U	R5	12.4	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	EPA:905.0	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	Sr-90	-0.11	pCi/g	0.0788	0.303	U	R5	8.7	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	EPA:905.0	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	Sr-90	0.0823	pCi/g	0.0679	0.232	U	R5	13	SD	U	N	GELC	05-Jan-15	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	HASL-300:ISOU	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	U-234	1.28	pCi/g	0.0707	0.0898	NQ	NQ	7.88	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	HASL-300:ISOU	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	U-234	1.04	pCi/g	0.0616	0.0828	NQ	NQ	3.09	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	HASL-300:ISOU	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	U-234	0.981	pCi/g	0.0618	0.0857	NQ	NQ	4.86	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	HASL-300:ISOU	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	U-234	1.17	pCi/g	0.0677	0.0896	NQ	NQ	4.43	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	HASL-300:ISOU	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	U-234	1.48	pCi/g	0.0779	0.0884	NQ	NQ	2.67	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	HASL-300:ISOU	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	U-234	1.06	pCi/g	0.065	0.0907	NQ	NQ	10.2	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	HASL-300:ISOU	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	U-234	0.807	pCi/g	0.0529	0.081	NQ	NQ	4.99	SD		Y	GELC	22-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	HASL-300:ISOU	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	U-234	1.37	pCi/g	0.0812	0.112	NQ	NQ	10.5	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	HASL-300:ISOU	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	U-234	1.71	pCi/g	0.0815	0.0898	NQ	NQ	12.4	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	HASL-300:ISOU	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	U-234	1.87	pCi/g	0.085	0.0902	NQ	NQ	8.7	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	HASL-300:ISOU	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	U-234	1.78	pCi/g	0.0857	0.0961	NQ	NQ	13	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	HASL-300:ISOU	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	U-235/236	0.042	pCi/g	0.0168	0.0679	U	R5	7.88	SD	U	N	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	HASL-300:ISOU	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	U-235/236	0.0603	pCi/g	0.0183	0.0626	U	R5	3.09	SD	U	N	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	HASL-300:ISOU	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	U-235/236	0.0936	pCi/g	0.0223	0.0648	NQ	NQ	4.86	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	HASL-300:ISOU	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	U-235/236	0.0466	pCi/g	0.0161	0.0677	U	R5	4.43	SD	U	N	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	HASL-300:ISOU	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	U-235/236	0.0919	pCi/g	0.0243	0.0668	NQ	NQ	2.67	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	HASL-300:ISOU	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	U-235/236	0.0236	pCi/g	0.0183	0.0686	U	R5	10.2	SD	U	N	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	HASL-300:ISOU	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	U-235/236	0.0253	pCi/g	0.0133	0.0612	U	R5	4.99	SD	U	N	GELC	22-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	HASL-300:ISOU	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	U-235/236	0.0817	pCi/g	0.0233	0.0849	U	R5	10.5	SD	U	N	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	HASL-300:ISOU	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	U-235/236	0.0933	pCi/g	0.0229	0.0679	NQ	NQ	12.4	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	HASL-300:ISOU	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	U-235/236	0.0938	pCi/g	0.023	0.0682	NQ	NQ	8.7	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	HASL-300:ISOU	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	U-235/236	0.145	pCi/g	0.0278	0.0727	NQ	NQ	13	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91166	HASL-300:ISOU	72-1054	C-2 Class 3 Recreation	1771319.63	1653275	U-238	1.3	pCi/g	0.071	0.0499	NQ	NQ	7.88	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91167	HASL-300:ISOU	72-1055	C-2 Class 3 Recreation	1771112.95	1653757	U-238	0.975	pCi/g	0.0595	0.0461	NQ	NQ	3.09	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91168	HASL-300:ISOU	72-1056	C-2 Class 3 Recreation	1771029.67	1653913	U-238	1.13	pCi/g	0.0645	0.0477	NQ	NQ	4.86	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91169	HASL-300:ISOU	72-1057	C-2 Class 3 Recreation	1770935.1	1654588	U-238	1.22	pCi/g	0.0685	0.0498	NQ	NQ	4.43	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91170	HASL-300:ISOU	72-1058	C-2 Class 3 Recreation	1771005.83	1655002	U-238	1.68	pCi/g	0.0807	0.0491	NQ	NQ	2.67	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91171	HASL-300:ISOU	72-1059	C-2 Class 3 Recreation	1771046.25	1655108	U-238	1.27	pCi/g	0.0709	0.0504	NQ	NQ	10.2	SD		Y	GELC	05-Jan-15	04-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91188	HASL-300:ISOU	72-1076	C-2 Class 3 Recreation	1771620.75	1653005	U-238	0.773	pCi/g	0.052	0.045	NQ	NQ	4.99	SD		Y	GELC	22-Dec-14	05-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91191	HASL-300:ISOU	72-1079	C-2 Class 3 Recreation	1771297.07	1653511	U-238	1.59	pCi/g	0.0873	0.0624	NQ	NQ	10.5	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91192	HASL-300:ISOU	72-1080	C-2 Class 3 Recreation	1771420.83	1655586	U-238	1.73	pCi/g	0.0812	0.0499	NQ	NQ	12.4	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91193	HASL-300:ISOU	72-1081	C-2 Class 3 Recreation	1771511.92	1655424	U-238	2.11	pCi/g	0.09	0.0502	NQ	NQ	8.7	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91194	HASL-300:ISOU	72-1082	C-2 Class 3 Recreation	1771239.99	1654910	U-238	1.94	pCi/g	0.0892	0.0534	NQ	NQ	13	SD		Y	GELC	22-Dec-14	05-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	HASL-300:AM-241	72-1007	C-3	1772888.11	1643375	Am-241	0.0306	pCi/g	0.00969	0.0299	NQ	NQ	1.59	SD		Y	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	HASL-300:AM-241	72-1008	C-3	1772986.09	1644379	Am-241	0.0076	pCi/g	0.00402	0.0252	U	R5	5.92	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	HASL-300:AM-241	72-1009	C-3	1773080.87	1642428	Am-241	0.00419	pCi/g	0.00464	0.0232	U	R5	2.63	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	HASL-300:AM-241	72-1010	C-3	1773054.65	1645380	Am-241	0.00581	pCi/g	0.00459	0.0241	U	R5	1.43	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	HASL-300:AM-241	72-1011	C-3	1772598.36	1645351	Am-241	0.0142	pCi/g	0.00602	0.0236	U	R5	7.65	SD	U	N	GELC	23-Dec-14	02-Dec-14	SED	SED

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	HASL-300:AM-241	72-1012	C-3	1772447.45	1646592	Am-241	0.00963	pCi/g	0.0116	0.0533	U	R5	5.22	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	HASL-300:AM-241	72-1013	C-3	1772406.59	1647284	Am-241	0.011	pCi/g	0.00515	0.0229	U	R5	2.12	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	HASL-300:AM-241	72-1014	C-3	1772382.53	1647374	Am-241	0.0102	pCi/g	0.00402	0.0211	U	R5	10.7	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	HASL-300:AM-241	72-1015	C-3	1772224.44	1647804	Am-241	0.0247	pCi/g	0.00952	0.0316	U	R5	5.41	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	HASL-300:AM-241	72-1016	C-3	1772190.08	1648497	Am-241	-0.0027	pCi/g	0.00604	0.0224	U	R5	11.2	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	HASL-300:AM-241	72-1017	C-3	1771751.89	1649675	Am-241	1.3E-09	pCi/g	0.0052	0.025	U	R5	6.33	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	EPA:901.1	72-1007	C-3	1772888.11	1643375	Co-60	0.0761	pCi/g	0.0234	0.117	U	R5	1.59	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	EPA:901.1	72-1008	C-3	1772986.09	1644379	Co-60	-0.0629	pCi/g	0.0285	0.0895	U	R5	5.92	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	EPA:901.1	72-1009	C-3	1773080.87	1642428	Co-60	-0.0545	pCi/g	0.0235	0.0755	U	R5	2.63	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	EPA:901.1	72-1010	C-3	1773054.65	1645380	Co-60	0.0251	pCi/g	0.03	0.105	U	R5	1.43	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	EPA:901.1	72-1011	C-3	1772598.36	1645351	Co-60	0.0378	pCi/g	0.0257	0.107	U	R5	7.65	SD	U	N	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	EPA:901.1	72-1012	C-3	1772447.45	1646592	Co-60	-0.0044	pCi/g	0.022	0.0824	U	R5	5.22	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	EPA:901.1	72-1013	C-3	1772406.59	1647284	Co-60	-0.0146	pCi/g	0.0264	0.0943	U	R5	2.12	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	EPA:901.1	72-1014	C-3	1772382.53	1647374	Co-60	-0.0103	pCi/g	0.0407	0.13	U	R5	10.7	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	EPA:901.1	72-1015	C-3	1772224.44	1647804	Co-60	0.0263	pCi/g	0.0289	0.112	U	R5	5.41	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	EPA:901.1	72-1016	C-3	1772190.08	1648497	Co-60	0.018	pCi/g	0.0296	0.115	U	R5	11.2	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	EPA:901.1	72-1017	C-3	1771751.89	1649675	Co-60	0.0636	pCi/g	0.0192	0.122	U	R5	6.33	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	EPA:901.1	72-1007	C-3	1772888.11	1643375	Cs-134	0.122	pCi/g	0.0441	0.13	U	R5	1.59	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	EPA:901.1	72-1010	C-3	1773054.65	1645380	Cs-134	0.0557	pCi/g	0.0311	0.124	U	R5	1.43	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	EPA:901.1	72-1011	C-3	1772598.36	1645351	Cs-134	0.069	pCi/g	0.0378	0.132	U	R5	7.65	SD	U	N	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	EPA:901.1	72-1012	C-3	1772447.45	1646592	Cs-134	0.0782	pCi/g	0.0521	0.132	U	R5	5.22	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	EPA:901.1	72-1014	C-3	1772382.53	1647374	Cs-134	0.136	pCi/g	0.0469	0.153	U	R5	10.7	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	EPA:901.1	72-1016	C-3	1772190.08	1648497	Cs-134	0.0909	pCi/g	0.0481	0.138	U	R5	11.2	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	EPA:901.1	72-1017	C-3	1771751.89	1649675	Cs-134	0.0984	pCi/g	0.0556	0.173	U	R5	6.33	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	EPA:901.1	72-1007	C-3	1772888.11	1643375	Cs-137	0.75	pCi/g	0.0548	0.0897	NQ	NQ	1.59	SD		Y	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	EPA:901.1	72-1008	C-3	1772986.09	1644379	Cs-137	0.278	pCi/g	0.0592	0.112	NQ	NQ	5.92	SD		Y	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	EPA:901.1	72-1009	C-3	1773080.87	1642428	Cs-137	0.12	pCi/g	0.0492	0.0765	U	R11	2.63	SD		N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	EPA:901.1	72-1010	C-3	1773054.65	1645380	Cs-137	0.0589	pCi/g	0.0304	0.117	U	R5	1.43	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	EPA:901.1	72-1011	C-3	1772598.36	1645351	Cs-137	0.153	pCi/g	0.0393	0.0919	NQ	NQ	7.65	SD		Y	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	EPA:901.1	72-1012	C-3	1772447.45	1646592	Cs-137	0.213	pCi/g	0.0515	0.0908	NQ	NQ	5.22	SD		Y	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	EPA:901.1	72-1013	C-3	1772406.59	1647284	Cs-137	0.0869	pCi/g	0.0385	0.0804	U	R11	2.12	SD		N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	EPA:901.1	72-1014	C-3	1772382.53	1647374	Cs-137	0.236	pCi/g	0.0531	0.0906	NQ	NQ	10.7	SD		Y	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	EPA:901.1	72-1015	C-3	1772224.44	1647804	Cs-137	0.181	pCi/g	0.0665	0.103	U	R11	5.41	SD		N	GELC	19-Dec-14	02-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	EPA:901.1	72-1016	C-3	1772190.08	1648497	Cs-137	0.215	pCi/g	0.0504	0.0911	NQ	NQ	11.2	SD		Y	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	EPA:901.1	72-1017	C-3	1771751.89	1649675	Cs-137	0.0754	pCi/g	0.0354	0.139	U	R5	6.33	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	EPA:906.0	72-1007	C-3	1772888.11	1643375	H-3	-0.699	pCi/g	0.85	3.81	U	R5	1.59	SD	U	N	GELC	26-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	EPA:906.0	72-1008	C-3	1772986.09	1644379	H-3	0.01856	pCi/g	0.00355527	0.0108861	NQ	NQ	5.92	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	EPA:906.0	72-1009	C-3	1773080.87	1642428	H-3	0.02304	pCi/g	0.00588826	0.0185021	NQ	NQ	2.63	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	EPA:906.0	72-1010	C-3	1773054.65	1645380	H-3	1.99	pCi/g	1.19	3.91	U	R5	1.43	SD	U	N	GELC	26-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	EPA:906.0	72-1011	C-3	1772598.36	1645351	H-3	0.01276	pCi/g	0.00456432	0.0146622	U	R5	7.65	SD	U	N	GELC	30-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	EPA:906.0	72-1012	C-3	1772447.45	1646592	H-3	0.00953	pCi/g	0.00349726	0.0112353	U	R5	5.22	SD	U	N	GELC	22-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	EPA:906.0	72-1013	C-3	1772406.59	1647284	H-3	0.12476	pCi/g	0.00305394	0.0046134	NQ	NQ	2.12	SD		Y	GELC	25-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	EPA:906.0	72-1014	C-3	1772382.53	1647374	H-3	0.28757	pCi/g	0.0105682	0.0204894	NQ	NQ	10.7	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	EPA:906.0	72-1015	C-3	1772224.44	1647804	H-3	0.05948	pCi/g	0.00400359	0.00995179	NQ	NQ	5.41	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	EPA:906.0	72-1016	C-3	1772190.08	1648497	H-3	0.46919	pCi/g	0.0131171	0.0216937	NQ	NQ	11.2	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	EPA:906.0	72-1017	C-3	1771751.89	1649675	H-3	0.06319	pCi/g	0.00455473	0.0115558	NQ	NQ	6.33	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	EPA:901.1	72-1007	C-3	1772888.11	1643375	Na-22	-0.0436	pCi/g	0.0345	0.119	U	R5	1.59	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	EPA:901.1	72-1008	C-3	1772986.09	1644379	Na-22	0.0782	pCi/g	0.0381	0.127	U	R5	5.92	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	EPA:901.1	72-1009	C-3	1773080.87	1642428	Na-22	-0.018	pCi/g	0.0269	0.0917	U	R5	2.63	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	EPA:901.1	72-1010	C-3	1773054.65	1645380	Na-22	0.00725	pCi/g	0.0304	0.113	U	R5	1.43	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	EPA:901.1	72-1011	C-3	1772598.36	1645351	Na-22	0.0104	pCi/g	0.0335	0.118	U	R5	7.65	SD	U	N	GELC	18-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	EPA:901.1	72-1012	C-3	1772447.45	1646592	Na-22	0.0191	pCi/g	0.0295	0.113	U	R5	5.22	SD	U	N	GELC	18-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	EPA:901.1	72-1013	C-3	1772406.59	1647284	Na-22	-0.0177	pCi/g	0.0374	0.132	U	R5	2.12	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	EPA:901.1	72-1014	C-3	1772382.53	1647374	Na-22	0.00418	pCi/g	0.0374	0.136	U	R5	10.7	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	EPA:901.1	72-1015	C-3	1772224.44	1647804	Na-22	0.00012	pCi/g	0.0381	0.136	U	R5	5.41	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	EPA:901.1	72-1016	C-3	1772190.08	1648497	Na-22	0.0639	pCi/g	0.0334	0.0848	U	R5	11.2	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	EPA:901.1	72-1017	C-3	1771751.89	1649675	Na-22	-0.0348	pCi/g	0.032	0.108	U	R5	6.33	SD	U	N	GELC	19-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	HASL-300:ISOPU	72-1007	C-3	1772888.11	1643375	Pu-238	0.00402	pCi/g	0.00493	0.0293	U	R5	1.59	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	HASL-300:ISOPU	72-1008	C-3	1772986.09	1644379	Pu-238	-0.00998	pCi/g	0.00528	0.029	U	R5	5.92	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	HASL-300:ISOPU	72-1009	C-3	1773080.87	1642428	Pu-238	0.00807	pCi/g	0.0057	0.0293	U	R5	2.63	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	HASL-300:ISOPU	72-1010	C-3	1773054.65	1645380	Pu-238	0.00221	pCi/g	0.00495	0.0322	U	R5	1.43	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	HASL-300:ISOPU	72-1011	C-3	1772598.36	1645351	Pu-238	0	pCi/g	0.00525	0.0382	U	R5	7.65	SD	U	N	GELC	23-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	HASL-300:ISOPU	72-1012	C-3	1772447.45	1646592	Pu-238	-0.00643	pCi/g	0.00479	0.0312	U	R5	5.22	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	HASL-300:ISOPU	72-1013	C-3	1772406.59	1647284	Pu-238	0.00166	pCi/g	0.0037	0.0241	U	R5	2.12	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	HASL-300:ISOPU	72-1014	C-3	1772382.53	1647374	Pu-238	-0.00163	pCi/g	0.00282	0.0237	U	R5	10.7	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	HASL-300:ISOPU	72-1015	C-3	1772224.44	1647804	Pu-238	-0.00179	pCi/g	0.00475	0.0261	U	R5	5.41	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	HASL-300:ISOPU	72-1016	C-3	1772190.08	1648497	Pu-238	-0.0037	pCi/g	0.00453	0.0269	U	R5	11.2	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	HASL-300:ISOPU	72-1017	C-3	1771751.89	1649675	Pu-238	0.00214	pCi/g	0.0037	0.0311	U	R5	6.33	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	HASL-300:ISOPU	72-1007	C-3	1772888.11	1643375	Pu-239/240	0.0583	pCi/g	0.0119	0.0283	J	R10	1.59	SD		Y	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	HASL-300:ISOPU	72-1008	C-3	1772986.09	1644379	Pu-239/240	0.00798	pCi/g	0.00798	0.0281	U	R5	5.92	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	HASL-300:ISOPU	72-1009	C-3	1773080.87	1642428	Pu-239/240	0.0161	pCi/g	0.00754	0.0284	U	R5	2.63	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	HASL-300:ISOPU	72-1010	C-3	1773054.65	1645380	Pu-239/240	0.00221	pCi/g	0.00798	0.0312	U	R5	1.43	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	HASL-300:ISOPU	72-1011	C-3	1772598.36	1645351	Pu-239/240	0.021	pCi/g	0.0105	0.037	U	R5	7.65	SD	U	N	GELC	23-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	HASL-300:ISOPU	72-1012	C-3	1772447.45	1646592	Pu-239/240	0.00214	pCi/g	0.00773	0.0302	U	R5	5.22	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	HASL-300:ISOPU	72-1013	C-3	1772406.59	1647284	Pu-239/240	0.00662	pCi/g	0.00876	0.0233	U	R5	2.12	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	HASL-300:ISOPU	72-1014	C-3	1772382.53	1647374	Pu-239/240	0.0211	pCi/g	0.0067	0.0229	U	R5	10.7	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	HASL-300:ISOPU	72-1015	C-3	1772224.44	1647804	Pu-239/240	0.0664	pCi/g	0.0112	0.0253	NQ	NQ	5.41	SD		Y	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	HASL-300:ISOPU	72-1016	C-3	1772190.08	1648497	Pu-239/240	0.0148	pCi/g	0.00584	0.026	U	R5	11.2	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	HASL-300:ISOPU	72-1017	C-3	1771751.89	1649675	Pu-239/240	0.0171	pCi/g	0.00799	0.0301	U	R5	6.33	SD	U	N	GELC	23-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	EPA:905.0	72-1007	C-3	1772888.11	1643375	Sr-90	0.19	pCi/g	0.0671	0.204	U	R5	1.59	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	EPA:905.0	72-1008	C-3	1772986.09	1644379	Sr-90	0.0345	pCi/g	0.0491	0.174	U	R5	5.92	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	EPA:905.0	72-1009	C-3	1773080.87	1642428	Sr-90	0.00013	pCi/g	0.0473	0.18	U	R5	2.63	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	EPA:905.0	72-1010	C-3	1773054.65	1645380	Sr-90	0.083	pCi/g	0.0603	0.203	U	R5	1.43	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	EPA:905.0	72-1011	C-3	1772598.36	1645351	Sr-90	-0.0399	pCi/g	0.0477	0.19	U	R5	7.65	SD	U	N	GELC	30-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	EPA:905.0	72-1012	C-3	1772447.45	1646592	Sr-90	0.0445	pCi/g	0.059	0.207	U	R5	5.22	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	EPA:905.0	72-1013	C-3	1772406.59	1647284	Sr-90	-0.0312	pCi/g	0.0791	0.289	U	R5	2.12	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	EPA:905.0	72-1014	C-3	1772382.53	1647374	Sr-90	-0.0554	pCi/g	0.0798	0.296	U	R5	10.7	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	EPA:905.0	72-1015	C-3	1772224.44	1647804	Sr-90	0.0551	pCi/g	0.0453	0.156	U	R5	5.41	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	EPA:905.0	72-1016	C-3	1772190.08	1648497	Sr-90	0.0793	pCi/g	0.077	0.263	U	R5	11.2	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	EPA:905.0	72-1017	C-3	1771751.89	1649675	Sr-90	0.0421	pCi/g	0.0553	0.198	U	R5	6.33	SD	U	N	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	HASL-300:ISOU	72-1007	C-3	1772888.11	1643375	U-234	1.1	pCi/g	0.0751	0.117	NQ	NQ	1.59	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	HASL-300:ISOU	72-1008	C-3	1772986.09	1644379	U-234	1.17	pCi/g	0.0747	0.108	NQ	NQ	5.92	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	HASL-300:ISOU	72-1009	C-3	1773080.87	1642428	U-234	0.896	pCi/g	0.0727	0.108	NQ	NQ	2.63	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	HASL-300:ISOU	72-1010	C-3	1773054.65	1645380	U-234	1.03	pCi/g	0.0747	0.12	NQ	NQ	1.43	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	HASL-300:ISOU	72-1011	C-3	1772598.36	1645351	U-234	1.3	pCi/g	0.0777	0.104	NQ	NQ	7.65	SD		Y	GELC	29-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	HASL-300:ISOU	72-1012	C-3	1772447.45	1646592	U-234	1.83	pCi/g	0.0961	0.117	NQ	NQ	5.22	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	HASL-300:ISOU	72-1013	C-3	1772406.59	1647284	U-234	1.84	pCi/g	0.0861	0.0912	NQ	NQ	2.12	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	HASL-300:ISOU	72-1014	C-3	1772382.53	1647374	U-234	1.81	pCi/g	0.0891	0.101	NQ	NQ	10.7	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	HASL-300:ISOU	72-1015	C-3	1772224.44	1647804	U-234	2.31	pCi/g	0.099	0.0995	NQ	NQ	5.41	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	HASL-300:ISOU	72-1016	C-3	1772190.08	1648497	U-234	1.83	pCi/g	0.0956	0.117	NQ	NQ	11.2	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	HASL-300:ISOU	72-1017	C-3	1771751.89	1649675	U-234	1.83	pCi/g	0.0915	0.105	NQ	NQ	6.33	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	HASL-300:ISOU	72-1007	C-3	1772888.11	1643375	U-235/236	0.0732	pCi/g	0.0228	0.0887	U	R5	1.59	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	HASL-300:ISOU	72-1008	C-3	1772986.09	1644379	U-235/236	0.0782	pCi/g	0.0224	0.0813	U	R5	5.92	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	HASL-300:ISOU	72-1009	C-3	1773080.87	1642428	U-235/236	-0.0112	pCi/g	0.0306	0.0814	U	R5	2.63	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	HASL-300:ISOU	72-1010	C-3	1773054.65	1645380	U-235/236	0.0813	pCi/g	0.0258	0.091	U	R5	1.43	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	HASL-300:ISOU	72-1011	C-3	1772598.36	1645351	U-235/236	0.0704	pCi/g	0.0223	0.0788	U	R5	7.65	SD	U	N	GELC	29-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	HASL-300:ISOU	72-1012	C-3	1772447.45	1646592	U-235/236	0.158	pCi/g	0.0333	0.0885	NQ	NQ	5.22	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	HASL-300:ISOU	72-1013	C-3	1772406.59	1647284	U-235/236	0.0569	pCi/g	0.0212	0.0689	U	R5	2.12	SD	U	N	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	HASL-300:ISOU	72-1014	C-3	1772382.53	1647374	U-235/236	0.0842	pCi/g	0.0235	0.0766	NQ	NQ	10.7	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	HASL-300:ISOU	72-1015	C-3	1772224.44	1647804	U-235/236	0.14	pCi/g	0.0278	0.0752	NQ	NQ	5.41	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	HASL-300:ISOU	72-1016	C-3	1772190.08	1648497	U-235/236	0.128	pCi/g	0.0293	0.0888	NQ	NQ	11.2	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	HASL-300:ISOU	72-1017	C-3	1771751.89	1649675	U-235/236	0.0931	pCi/g	0.0239	0.0797	NQ	NQ	6.33	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91119	HASL-300:ISOU	72-1007	C-3	1772888.11	1643375	U-238	1.14	pCi/g	0.0753	0.0652	NQ	NQ	1.59	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91120	HASL-300:ISOU	72-1008	C-3	1772986.09	1644379	U-238	1.15	pCi/g	0.073	0.0598	NQ	NQ	5.92	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91121	HASL-300:ISOU	72-1009	C-3	1773080.87	1642428	U-238	0.955	pCi/g	0.0711	0.0598	NQ	NQ	2.63	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91122	HASL-300:ISOU	72-1010	C-3	1773054.65	1645380	U-238	1.14	pCi/g	0.0763	0.0669	NQ	NQ	1.43	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91123	HASL-300:ISOU	72-1011	C-3	1772598.36	1645351	U-238	1.31	pCi/g	0.0784	0.058	NQ	NQ	7.65	SD		Y	GELC	29-Dec-14	02-Dec-14	SED	SED
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91124	HASL-300:ISOU	72-1012	C-3	1772447.45	1646592	U-238	1.74	pCi/g	0.0934	0.0651	NQ	NQ	5.22	SD		Y	GELC	30-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91125	HASL-300:ISOU	72-1013	C-3	1772406.59	1647284	U-238	1.93	pCi/g	0.0866	0.0507	NQ	NQ	2.12	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91126	HASL-300:ISOU	72-1014	C-3	1772382.53	1647374	U-238	1.81	pCi/g	0.0888	0.0563	NQ	NQ	10.7	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91127	HASL-300:ISOU	72-1015	C-3	1772224.44	1647804	U-238	2.41	pCi/g	0.101	0.0553	NQ	NQ	5.41	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91128	HASL-300:ISOU	72-1016	C-3	1772190.08	1648497	U-238	1.66	pCi/g	0.0918	0.0653	NQ	NQ	11.2	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91129	HASL-300:ISOU	72-1017	C-3	1771751.89	1649675	U-238	1.82	pCi/g	0.0903	0.0586	NQ	NQ	6.33	SD		Y	GELC	29-Dec-14	02-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	HASL-300:AM-241	72-1088	C-4	1770829.62	1649609	Am-241	0.0103	pCi/g	0.00544	0.0286	U	R5	10.1	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	HASL-300:AM-241	72-1089	C-4	1770708.72	1649394	Am-241	0.0114	pCi/g	0.00537	0.0315	U	R5	11.7	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	HASL-300:AM-241	72-1090	C-4	1770140.17	1647975	Am-241	0.00517	pCi/g	0.00456	0.0286	U	R5	7.81	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	HASL-300:AM-241	72-1091	C-4	1768675.9	1647845	Am-241	0.00655	pCi/g	0.00567	0.0272	U	R5	4.19	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	HASL-300:AM-241	72-1092	C-4	1768066.76	1648033	Am-241	-0.0016	pCi/g	0.00424	0.0266	U	R5	8.95	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	HASL-300:AM-241	72-1093	C-4	1767989.87	1647950	Am-241	0.00482	pCi/g	0.00425	0.0267	U	R5	9.83	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	HASL-300:AM-241	72-1094	C-4	1767521.69	1648184	Am-241	0.00464	pCi/g	0.00409	0.0257	U	R5	7.51	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	HASL-300:AM-241	72-1095	C-4	1767344.39	1648266	Am-241	0.00313	pCi/g	0.00313	0.026	U	R5	9.91	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	HASL-300:AM-241	72-1096	C-4	1766936.13	1648512	Am-241	0.0108	pCi/g	0.00556	0.0256	U	R5	10.5	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	HASL-300:AM-241	72-1097	C-4	1766725.56	1648711	Am-241	0.00166	pCi/g	0.00497	0.0275	U	R5	11.5	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	HASL-300:AM-241	72-1098	C-4	1767204.14	1648463	Am-241	0.00921	pCi/g	0.00552	0.0306	U	R5	14.4	SD	U	N	GELC	26-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	EPA:901.1	72-1088	C-4	1770829.62	1649609	Co-60	-0.0154	pCi/g	0.0212	0.0738	U	R5	10.1	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	EPA:901.1	72-1089	C-4	1770708.72	1649394	Co-60	0.0128	pCi/g	0.0176	0.0671	U	R5	11.7	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	EPA:901.1	72-1090	C-4	1770140.17	1647975	Co-60	-0.00299	pCi/g	0.0195	0.0705	U	R5	7.81	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	EPA:901.1	72-1091	C-4	1768675.9	1647845	Co-60	0.0151	pCi/g	0.0262	0.0976	U	R5	4.19	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	EPA:901.1	72-1092	C-4	1768066.76	1648033	Co-60	-0.00092	pCi/g	0.0229	0.0762	U	R5	8.95	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	EPA:901.1	72-1093	C-4	1767989.87	1647950	Co-60	-0.0102	pCi/g	0.0202	0.0695	U	R5	9.83	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	EPA:901.1	72-1094	C-4	1767521.69	1648184	Co-60	-0.00746	pCi/g	0.0233	0.0854	U	R5	7.51	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	EPA:901.1	72-1095	C-4	1767344.39	1648266	Co-60	-0.00777	pCi/g	0.0148	0.0523	U	R5	9.91	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	EPA:901.1	72-1096	C-4	1766936.13	1648512	Co-60	0.0207	pCi/g	0.0199	0.0757	U	R5	10.5	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	EPA:901.1	72-1097	C-4	1766725.56	1648711	Co-60	0.0634	pCi/g	0.0273	0.113	U	R5	11.5	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	EPA:901.1	72-1098	C-4	1767204.14	1648463	Co-60	-0.00833	pCi/g	0.0218	0.0583	U	R5	14.4	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	EPA:901.1	72-1091	C-4	1768675.9	1647845	Cs-134	0.112	pCi/g	0.039	0.123	U	R5	4.19	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	EPA:901.1	72-1094	C-4	1767521.69	1648184	Cs-134	0.084	pCi/g	0.0334	0.109	U	R5	7.51	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	EPA:901.1	72-1095	C-4	1767344.39	1648266	Cs-134	0.0595	pCi/g	0.0205	0.0649	U	R5	9.91	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	EPA:901.1	72-1096	C-4	1766936.13	1648512	Cs-134	0.045	pCi/g	0.0237	0.0788	U	R5	10.5	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	EPA:901.1	72-1097	C-4	1766725.56	1648711	Cs-134	0.0747	pCi/g	0.0325	0.114	U	R5	11.5	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	EPA:901.1	72-1088	C-4	1770829.62	1649609	Cs-137	0.0648	pCi/g	0.0248	0.0652	U	R5	10.1	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	EPA:901.1	72-1089	C-4	1770708.72	1649394	Cs-137	0.121	pCi/g	0.0238	0.0545	NQ	NQ	11.7	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	EPA:901.1	72-1090	C-4	1770140.17	1647975	Cs-137	0.0889	pCi/g	0.0306	0.0822	U	R11	7.81	SD		N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	EPA:901.1	72-1091	C-4	1768675.9	1647845	Cs-137	0.0168	pCi/g	0.0283	0.0994	U	R5	4.19	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	EPA:901.1	72-1092	C-4	1768066.76	1648033	Cs-137	0.0792	pCi/g	0.0365	0.0698	U	R11	8.95	SD		N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	EPA:901.1	72-1094	C-4	1767521.69	1648184	Cs-137	0.217	pCi/g	0.0321	0.0539	NQ	NQ	7.51	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	EPA:901.1	72-1095	C-4	1767344.39	1648266	Cs-137	0.088	pCi/g	0.0229	0.0476	NQ	NQ	9.91	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	EPA:901.1	72-1096	C-4	1766936.13	1648512	Cs-137	0.343	pCi/g	0.0341	0.0648	NQ	NQ	10.5	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	EPA:901.1	72-1097	C-4	1766725.56	1648711	Cs-137	0.0912	pCi/g	0.0357	0.0768	U	R11	11.5	SD		N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	EPA:901.1	72-1098	C-4	1767204.14	1648463	Cs-137	0.258	pCi/g	0.0381	0.0601	NQ	NQ	14.4	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	EPA:906.0	72-1088	C-4	1770829.62	1649609	H-3	0.03663	pCi/g	0.00632514	0.0189867	NQ	NQ	10.1	SD		Y	GELC	03-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	EPA:906.0	72-1089	C-4	1770708.72	1649394	H-3	0.08944	pCi/g	0.00833443	0.0225255	NQ	NQ	11.7	SD		Y	GELC	03-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	EPA:906.0	72-1090	C-4	1770140.17	1647975	H-3	0.18553	pCi/g	0.00724325	0.0144018	NQ	NQ	7.81	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	EPA:906.0	72-1091	C-4	1768675.9	1647845	H-3	0.11196	pCi/g	0.00396653	0.00747824	NQ	NQ	4.19	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	EPA:906.0	72-1092	C-4	1768066.76	1648033	H-3	0.2428	pCi/g	0.00876815	0.0167106	NQ	NQ	8.95	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	EPA:906.0	72-1093	C-4	1767989.87	1647950	H-3	0.13518	pCi/g	0.00780557	0.0183147	NQ	NQ	9.83	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	EPA:906.0	72-1094	C-4	1767521.69	1648184	H-3	0.16889	pCi/g	0.00689371	0.0139661	NQ	NQ	7.51	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	EPA:906.0	72-1095	C-4	1767344.39	1648266	H-3	0.1529	pCi/g	0.00818408	0.0187002	NQ	NQ	9.91	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	EPA:906.0	72-1096	C-4	1766936.13	1648512	H-3	0.17598	pCi/g	0.00888101	0.0198268	NQ	NQ	10.5	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	EPA:906.0	72-1097	C-4	1766725.56	1648711	H-3	0.07069	pCi/g	0.00795254	0.0223503	NQ	NQ	11.5	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	EPA:906.0	72-1098	C-4	1767204.14	1648463	H-3	0.14232	pCi/g	0.0111196	0.0287664	NQ	NQ	14.4	SD		Y	GELC	04-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	EPA:901.1	72-1088	C-4	1770829.62	1649609	Na-22	0.0381	pCi/g	0.0297	0.0987	U	R5	10.1	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	EPA:901.1	72-1089	C-4	1770708.72	1649394	Na-22	-0.01	pCi/g	0.0203	0.072	U	R5	11.7	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	EPA:901.1	72-1090	C-4	1770140.17	1647975	Na-22	0.0343	pCi/g	0.0238	0.0906	U	R5	7.81	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	EPA:901.1	72-1091	C-4	1768675.9	1647845	Na-22	0.0186	pCi/g	0.03	0.11	U	R5	4.19	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	EPA:901.1	72-1092	C-4	1768066.76	1648033	Na-22	0.0078	pCi/g	0.0242	0.0763	U	R5	8.95	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	EPA:901.1	72-1093	C-4	1767989.87	1647950	Na-22	0.0167	pCi/g	0.0279	0.0857	U	R5	9.83	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	EPA:901.1	72-1094	C-4	1767521.69	1648184	Na-22	-0.00968	pCi/g	0.0313	0.0972	U	R5	7.51	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	EPA:901.1	72-1095	C-4	1767344.39	1648266	Na-22	-0.0148	pCi/g	0.0171	0.0571	U	R5	9.91	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	EPA:901.1	72-1096	C-4	1766936.13	1648512	Na-22	0.0201	pCi/g	0.0205	0.0762	U	R5	10.5	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	EPA:901.1	72-1097	C-4	1766725.56	1648711	Na-22	0.0345	pCi/g	0.0276	0.108	U	R5	11.5	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	EPA:901.1	72-1098	C-4	1767204.14	1648463	Na-22	0.0169	pCi/g	0.0211	0.0775	U	R5	14.4	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	HASL-300:ISOPU	72-1088	C-4	1770829.62	1649609	Pu-238	0.00177	pCi/g	0.00395	0.0257	U	R5	10.1	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	HASL-300:ISOPU	72-1089	C-4	1770708.72	1649394	Pu-238	0.00206	pCi/g	0.0046	0.0299	U	R5	11.7	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	HASL-300:ISOPU	72-1090	C-4	1770140.17	1647975	Pu-238	0	pCi/g	0.00312	0.0227	U	R5	7.81	SD	U	N	GELC	05-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	HASL-300:ISOPU	72-1091	C-4	1768675.9	1647845	Pu-238	0.00169	pCi/g	0.00378	0.0246	U	R5	4.19	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	HASL-300:ISOPU	72-1092	C-4	1768066.76	1648033	Pu-238	-0.0016	pCi/g	0.00277	0.0232	U	R5	8.95	SD	U	N	GELC	05-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	HASL-300:ISOPU	72-1093	C-4	1767989.87	1647950	Pu-238	-0.00352	pCi/g	0.00352	0.0256	U	R5	9.83	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	HASL-300:ISOPU	72-1094	C-4	1767521.69	1648184	Pu-238	0	pCi/g	0.0045	0.0267	U	R5	7.51	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	HASL-300:ISOPU	72-1095	C-4	1767344.39	1648266	Pu-238	0	pCi/g	0.00427	0.0254	U	R5	9.91	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	HASL-300:ISOPU	72-1096	C-4	1766936.13	1648512	Pu-238	0	pCi/g	0.00342	0.0249	U	R5	10.5	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	HASL-300:ISOPU	72-1097	C-4	1766725.56	1648711	Pu-238	-0.00355	pCi/g	0.00355	0.0258	U	R5	11.5	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	HASL-300:ISOPU	72-1098	C-4	1767204.14	1648463	Pu-238	0.00187	pCi/g	0.00323	0.0271	U	R5	14.4	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	HASL-300:ISOPU	72-1088	C-4	1770829.62	1649609	Pu-239/240	0.00883	pCi/g	0.011	0.0249	U	R5	10.1	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	HASL-300:ISOPU	72-1089	C-4	1770708.72	1649394	Pu-239/240	0.0164	pCi/g	0.00964	0.029	U	R5	11.7	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	HASL-300:ISOPU	72-1090	C-4	1770140.17	1647975	Pu-239/240	0.00156	pCi/g	0.00467	0.022	U	R5	7.81	SD	U	N	GELC	05-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	HASL-300:ISOPU	72-1091	C-4	1768675.9	1647845	Pu-239/240	0.0101	pCi/g	0.00534	0.0238	U	R5	4.19	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	HASL-300:ISOPU	72-1092	C-4	1768066.76	1648033	Pu-239/240	0.0192	pCi/g	0.00814	0.0225	U	R5	8.95	SD	U	N	GELC	05-Jan-15	08-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	HASL-300:ISOPU	72-1093	C-4	1767989.87	1647950	Pu-239/240	0.00704	pCi/g	0.00704	0.0248	U	R5	9.83	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	HASL-300:ISOPU	72-1094	C-4	1767521.69	1648184	Pu-239/240	0.00184	pCi/g	0.00662	0.0259	U	R5	7.51	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	HASL-300:ISOPU	72-1095	C-4	1767344.39	1648266	Pu-239/240	-0.00174	pCi/g	0.00799	0.0246	U	R5	9.91	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	HASL-300:ISOPU	72-1096	C-4	1766936.13	1648512	Pu-239/240	0.0205	pCi/g	0.00639	0.0241	U	R5	10.5	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	HASL-300:ISOPU	72-1097	C-4	1766725.56	1648711	Pu-239/240	0.00532	pCi/g	0.00588	0.025	U	R5	11.5	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	HASL-300:ISOPU	72-1098	C-4	1767204.14	1648463	Pu-239/240	0.0168	pCi/g	0.00813	0.0263	U	R5	14.4	SD	U	N	GELC	28-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	EPA:905.0	72-1088	C-4	1770829.62	1649609	Sr-90	-0.104	pCi/g	0.0539	0.231	U	R5	10.1	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	EPA:905.0	72-1089	C-4	1770708.72	1649394	Sr-90	-0.0145	pCi/g	0.0373	0.15	U	R5	11.7	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	EPA:905.0	72-1090	C-4	1770140.17	1647975	Sr-90	0.0577	pCi/g	0.0439	0.15	U	R5	7.81	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	EPA:905.0	72-1091	C-4	1768675.9	1647845	Sr-90	-0.0204	pCi/g	0.0475	0.185	U	R5	4.19	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	EPA:905.0	72-1092	C-4	1768066.76	1648033	Sr-90	0.042	pCi/g	0.0585	0.206	U	R5	8.95	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	EPA:905.0	72-1093	C-4	1767989.87	1647950	Sr-90	0.208	pCi/g	0.0815	0.252	U	R5	9.83	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	EPA:905.0	72-1094	C-4	1767521.69	1648184	Sr-90	0.239	pCi/g	0.0855	0.263	U	R5	7.51	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	EPA:905.0	72-1095	C-4	1767344.39	1648266	Sr-90	0.131	pCi/g	0.0635	0.203	U	R5	9.91	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	EPA:905.0	72-1096	C-4	1766936.13	1648512	Sr-90	-0.0155	pCi/g	0.0961	0.348	U	R5	10.5	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	EPA:905.0	72-1097	C-4	1766725.56	1648711	Sr-90	0.0117	pCi/g	0.0477	0.18	U	R5	11.5	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	EPA:905.0	72-1098	C-4	1767204.14	1648463	Sr-90	-0.0354	pCi/g	0.0426	0.177	U	R5	14.4	SD	U	N	GELC	06-Jan-15	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	HASL-300:ISOU	72-1088	C-4	1770829.62	1649609	U-234	1.05	pCi/g	0.0654	0.0921	NQ	NQ	10.1	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	HASL-300:ISOU	72-1089	C-4	1770708.72	1649394	U-234	1.05	pCi/g	0.0621	0.0852	NQ	NQ	11.7	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	HASL-300:ISOU	72-1090	C-4	1770140.17	1647975	U-234	1.05	pCi/g	0.0633	0.0898	NQ	NQ	7.81	SD		Y	GELC	30-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	HASL-300:ISOU	72-1091	C-4	1768675.9	1647845	U-234	1.19	pCi/g	0.0676	0.0895	NQ	NQ	4.19	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	HASL-300:ISOU	72-1092	C-4	1768066.76	1648033	U-234	1.4	pCi/g	0.0762	0.0947	NQ	NQ	8.95	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	HASL-300:ISOU	72-1093	C-4	1767989.87	1647950	U-234	0.963	pCi/g	0.0618	0.0902	NQ	NQ	9.83	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	HASL-300:ISOU	72-1094	C-4	1767521.69	1648184	U-234	1.34	pCi/g	0.0745	0.0952	NQ	NQ	7.51	SD		Y	GELC	30-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	HASL-300:ISOU	72-1095	C-4	1767344.39	1648266	U-234	0.997	pCi/g	0.0711	0.113	NQ	NQ	9.91	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	HASL-300:ISOU	72-1096	C-4	1766936.13	1648512	U-234	1.12	pCi/g	0.0704	0.0991	NQ	NQ	10.5	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	HASL-300:ISOU	72-1097	C-4	1766725.56	1648711	U-234	1.16	pCi/g	0.0692	0.0947	NQ	NQ	11.5	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	HASL-300:ISOU	72-1098	C-4	1767204.14	1648463	U-234	1.37	pCi/g	0.0725	0.0906	NQ	NQ	14.4	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	HASL-300:ISOU	72-1088	C-4	1770829.62	1649609	U-235/236	0.0527	pCi/g	0.0197	0.0696	U	R5	10.1	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	HASL-300:ISOU	72-1089	C-4	1770708.72	1649394	U-235/236	0.0531	pCi/g	0.0177	0.0644	U	R5	11.7	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	HASL-300:ISOU	72-1090	C-4	1770140.17	1647975	U-235/236	0.107	pCi/g	0.0233	0.0679	NQ	NQ	7.81	SD		Y	GELC	30-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	HASL-300:ISOU	72-1091	C-4	1768675.9	1647845	U-235/236	0.0465	pCi/g	0.0186	0.0677	U	R5	4.19	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	HASL-300:ISOU	72-1092	C-4	1768066.76	1648033	U-235/236	0.0492	pCi/g	0.0209	0.0716	U	R5	8.95	SD	U	N	GELC	23-Dec-14	08-Dec-14	S	ALLH

SAMPLING PLAN NAME	FIELD SAMPLE ID	ANALYTICAL METHOD	LOCATION ID	Area	NORTHING	EASTING	PARAMETER CODE	REPORT RESULT	REPORT UNITS	REPORT UNCERTAINTY	REPORT MINIMUM DETECTABLE ACTIVITY	VALIDATION QUALIFIER	VALIDATION REASON CODES	PERCENT MOISTURE	LAB MATRIX	LAB QUALIFIER	DETECT FLAG	LAB ID	DISPLAY ANALYSIS DATE	DISPLAY SAMPLE DATE	SAMPLE TYPE	BACKGROUND COMPARISON MEDIA CODE
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	HASL-300:ISOU	72-1093	C-4	1767989.87	1647950	U-235/236	0.131	pCi/g	0.0257	0.0682	NQ	NQ	9.83	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	HASL-300:ISOU	72-1094	C-4	1767521.69	1648184	U-235/236	0.0791	pCi/g	0.0232	0.0719	NQ	NQ	7.51	SD		Y	GELC	30-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	HASL-300:ISOU	72-1095	C-4	1767344.39	1648266	U-235/236	0.0587	pCi/g	0.0203	0.0854	U	R5	9.91	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	HASL-300:ISOU	72-1096	C-4	1766936.13	1648512	U-235/236	0.124	pCi/g	0.0263	0.075	NQ	NQ	10.5	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	HASL-300:ISOU	72-1097	C-4	1766725.56	1648711	U-235/236	0.0492	pCi/g	0.0184	0.0716	U	R5	11.5	SD	U	N	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	HASL-300:ISOU	72-1098	C-4	1767204.14	1648463	U-235/236	0.0942	pCi/g	0.0221	0.0685	NQ	NQ	14.4	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91200	HASL-300:ISOU	72-1088	C-4	1770829.62	1649609	U-238	0.968	pCi/g	0.0622	0.0512	NQ	NQ	10.1	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91201	HASL-300:ISOU	72-1089	C-4	1770708.72	1649394	U-238	0.96	pCi/g	0.0589	0.0474	NQ	NQ	11.7	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91202	HASL-300:ISOU	72-1090	C-4	1770140.17	1647975	U-238	1.1	pCi/g	0.0653	0.0499	NQ	NQ	7.81	SD		Y	GELC	30-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91203	HASL-300:ISOU	72-1091	C-4	1768675.9	1647845	U-238	1	pCi/g	0.0624	0.0498	NQ	NQ	4.19	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91204	HASL-300:ISOU	72-1092	C-4	1768066.76	1648033	U-238	1.36	pCi/g	0.0744	0.0526	NQ	NQ	8.95	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91205	HASL-300:ISOU	72-1093	C-4	1767989.87	1647950	U-238	1.04	pCi/g	0.0636	0.0501	NQ	NQ	9.83	SD		Y	GELC	23-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91206	HASL-300:ISOU	72-1094	C-4	1767521.69	1648184	U-238	1.3	pCi/g	0.0727	0.0529	NQ	NQ	7.51	SD		Y	GELC	30-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91207	HASL-300:ISOU	72-1095	C-4	1767344.39	1648266	U-238	0.921	pCi/g	0.0678	0.0628	NQ	NQ	9.91	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91208	HASL-300:ISOU	72-1096	C-4	1766936.13	1648512	U-238	1.12	pCi/g	0.0686	0.0551	NQ	NQ	10.5	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91209	HASL-300:ISOU	72-1097	C-4	1766725.56	1648711	U-238	1.06	pCi/g	0.0659	0.0526	NQ	NQ	11.5	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH
DOE Land Transfer Tracts - C-2/C-3/C-4	RE72-15-91210	HASL-300:ISOU	72-1098	C-4	1767204.14	1648463	U-238	1.3	pCi/g	0.0713	0.0504	NQ	NQ	14.4	SD		Y	GELC	24-Dec-14	08-Dec-14	S	ALLH