TECHNICAL MEMORANDUM
SUBAREA 5A, ROUND 2, SOIL SAMPLE RESULTS
SANTA SUSANA FIELD LABORATORY SITE
AREA IV RADIOLOGICAL STUDY

TO:	Andrew Bain, EPA Region 9 RPM
FROM:	T. Stewart Williford, P.G., HGL
THROUGH:	L. Steven Vaughn, R.G., HGL Project Manager
	Rene R. Rodriguez, P.E., HGL Deputy Project Manager
CC:	Mary Aycock, EPA Region 9 RPM
	Shiann-Jang Chern, Ph.D., P.E., EPA Region 9 RPM
	Gregg Dempsey, Technical Advisor
DATE:	November 26, 2012
SUBJECT:	Subarea 5A, Round 2 Soil Sample Results
CONTRACT NO:	EP-S7-05-05
TASK ORDER NO:	0038

1.0 INTRODUCTION

HydroGeoLogic, Inc. (HGL) is conducting a comprehensive radiological characterization study of Area IV and the Northern Buffer Zone (NBZ) at the Santa Susana Field Laboratory (SSFL) site in Ventura County, California. This work is being executed under U.S. Environmental Protection Agency (USEPA) Region 7 Architect and Engineering Services Contract EP-S7-05-05, Task Order 0038. The technical lead on the project is USEPA Region 9.

As part of the radiological study, surface and subsurface soil samples were collected from locations identified from geophysical surveys, gamma scanning, historical aerial photographs and findings of the Historical Site Assessment. Sampling efforts in the study area were divided into subareas. Analytical results from the Round 1 sampling activities were reviewed in conjunction with the aforementioned lines of evidence, and sample locations were targeted for further investigation in the Round 2 soil sampling effort. This technical memorandum documents the soil sampling activities, analytical results, and conclusions of the Round 2 soil sampling. The primary objective of the soil sampling effort was to further investigate potential radionuclide contamination by laterally and vertically delineating radionuclide concentrations that exceeded project established Radiological Trigger Levels (RTL) detected during the Round 1 sampling activities. This objective was achieved through the collection and analysis of step-out surface and subsurface soil sample locations, as described in Section 4.2 of the Final FSP for Soil Sampling (HGL, 2012a). If an exceedance was isolated, a step-out location was placed approximately 15 feet north, south, east, and west of the Round 1 exceedance locations. If there were multiple Round 1 exceedances in a specific area, step-out sampling locations were targeted around the exceedances to best characterize the lateral and vertical extent of potential radionuclide impacted soils.

The approach for Round 2 soil sampling was to identify potential sample locations from the lines of evidence listed above, prepare a Round 2 Field Sampling Plan (FSP) Addendum for the subarea, present the FSP, and review and finalize proposed locations with USEPA's SSFL Technical Stakeholder Workgroup.

2.0 SOIL SAMPLING ACTIVITIES

2.1 Soil Sample Location Placement and Utility Clearance

A total of 27 surface soil and 27 subsurface soil Round 2 samples were proposed in the Subarea 5A Round 2 Addendum to the Final FSP for Soil Sampling (HGL, 2012b). This sampling was proposed based on Round 1 sample exceedances detected at eight locations. The rationale for soil step-out sample locations is detailed in the Subarea 5A Round 2 Addendum (HGL, 2012b). Table 1 summarizes the proposed samples and lists the samples collected by area and sample type. Figure 1 illustrates all the soil sample locations (proposed and collected). Deviations from the FSP are discussed in Section 2.3.

Table 1
Summary of Planned and Collected Step-out Samples by Area

Area	Surface		Subsurface		Total	
	Planned	Collected	Planned	Collected	Planned	Collected
Former Building 4093 Area	6	6	6	5	12	11
Former Building 4064 Area	6	6	6	6	12	12
Former Building 4005 and Former Building 4023	12	12	12	11	24	23
Heavy Metal likely Remediation Zone	3	3	3	3	6	6
Total	**27**	**27**	**27**	**25**	**54**	**52**

The proposed sampling locations were discussed during the technical review meeting held on May 30, 2012, with members of USEPA's SSFL Technical Stakeholder Workgroup consisting of representatives of the Department of Energy (DOE), the State of California Department of Toxic Substances Control (DTSC), The Boeing Company (Boeing), USEPA, and the community.

After the locations were finalized with the Stakeholder Workgroup, proposed sampling locations were marked in the field using a SPS 852 handheld Trimble global positioning system (GPS) and magnetic survey spikes. Before sampling activities commenced, utility clearances were performed at each location by Underground Service Alert (Dig Alert) and a private utility locator.

2.2 Sample Collection

Surface soil samples were collected using a stainless steel trowel or shovel. Subsurface samples were collected using a Geoprobe 6600 Series direct-push technology unit or a hand auger. Soil samples were collected in accordance with the procedures detailed in the Final

FSP for Soil Sampling (HGL, 2012a), and the Round 2 FSP Addendum for Subarea 5A (HGL, 2012b). Soil cores were logged and the boring logs are provided in Attachment 2. A total of 52 soil samples (27 surface and 25 subsurface) were collected from July 6 to July 13, 2012.

During the May 30, 2012, technical review meeting, recommendations and action items including those on the topic of Likely Chemical Remediation Zones (LCRZ) and Likely Decontamination and Decommissioning Zone (LD&DZ) were discussed. Former Building 4093 and Former Building 4005 were designated as an LD&DZ. A small area in the southern portion of Subarea 5A known as the Heavy Metal Likely Remediation Zone was designated as an LCRZ. USEPA understands that most, if not all, surface soil and infrastructure (building structures, concrete slabs, above-ground pipelines and underground pipelines etc.) may be excavated and removed from areas identified as LD&DZ and LCRZ. In accordance with USEPA's role under the Administrative Order on Consent (AOC) for Remedial Action (DTSC, 2010) between DTSC and DOE for the SSFL site, USEPA will conduct confirmation soil sampling to verify that site remediation goals have been achieved at all such remediation zones. These follow-on efforts are not included in the current scope of work and will be accomplished using additional external funding.

2.3 Deviations from the Field Sampling Plan Addendum

Two subsurface soil samples were not collected from Locations 5A-00262 and 5A-00273 due to insufficient soil volume as a result of shallow refusal at bedrock. When shallow refusal was encountered two additional attempts were made, within a five foot radius, to reach the proposed depth. If after the third attempt the proposed depth could not be reached a sample was collected, if possible. Table 2 summarizes the deviations from the FSP.

Table 2
Summary of Subsurface Sample Deviations

Sample Location	Sample ID	Justification
5A-00262	30446	No sample collected due to shallow refusal at bedrock at 1.17 ft bgs.
5A-00273	30468	No sample collected due to shallow refusal at bedrock at 0.5 ft bgs.

Notes:
bgs – below ground surface
ft – feet
ID – identification

2.4 Soil Boring Summary

A total of 27 subsurface borings were attempted, of which three borings were advanced to 10 feet below ground surface (bgs), 10 were terminated between 5 to 10 feet bgs, and 14 were completed at a depth less than 5 feet bgs. The 24 boreholes that were not advanced to a depth of 10 feet bgs were terminated as a result of refusal at bedrock.

Soil samples were classified and described in accordance with the Final FSP for Soil Sampling (HGL, 2012a). The most common soil types observed were sand, silty sand, silt, and silty

clay. A total of 18 locations encountered fill material in all or a portion of the boring. The fill material consisted of soils that exhibited a mottled texture and frequently contained material such as concrete, asphalt or glass. Native soil was encountered below fill material in 15 of the 18 borings. A total of nine borings consisted of only native soil. A summary of the boring log information is presented in Table A.1 and the boring logs are provided in Attachment 2.

3.0 SOIL ANALYTICAL RESULTS

Soil samples were analyzed in accordance with the Final Quality Assurance Project Plan (QAPP) for Soil Sampling (HGL, 2012c). All samples were collected in accordance with the rationale presented in Table 2.3 of the Final FSP for Soil Sampling (HGL, 2012a). Round 2 sample locations and analytical suites are presented in the Subarea 5A Round 2 Addendum to the Final FSP for Soil Sampling (HGL, 2012b). Deviations from the Round 2 FSP addendum are presented in Section 2.3.

3.1 Round 1 Data Quality Gap Reanalysis

A data quality gap is a sample result for which the minimum detectable concentration (MDC) is greater than the RTL, but the reported activity is below the RTL, indicating an indeterminate result that may or may not exceed the RTL. The elevated MDC could be the result of sample matrix or spectral interference or, in some cases, laboratory issues that prevent accurate quantification of sample activity to a level low enough to support the RTLs.

The use of RTLs is predicated on the assumption that analytical results will be of known and predictable quality, with the uncertainty constrained to a level that supports direct comparison of results to RTLs. The reported analytical uncertainty is sufficiently reliable to be considered, however the magnitude of that uncertainty may not always allow direct comparison of the activity to the RTL, as discussed above. In many cases, the reported activity is sufficiently below the RTL (more than the associated, elevated 2σ total propagated uncertainty) to decide that the result does not represent an exceedance. For these cases, results are removed from further data quality gap assessment.

During the Round 1 sampling event, there were two samples (four results) identified as data quality gaps, in which the laboratory was directed to reanalyze the sample to achieve a lower MDC value. Sample 30236 was identified as a data quality gap for plutonium (Pu)-236, Pu-238, and Pu-244, all of which are related to the same isotopic plutonium analysis. The initial analyses showed poor spectral resolution, apparently due to an undetermined matrix effect, and a low chemical yield. Sample 30124 was identified as a data quality gap for americium (Am)-241, which resulted from a low chemical yield of 53.9 percent.

The MDC values for all reanalyzed samples were lower than the RTLs; therefore, these samples are no longer considered data quality gaps. Also, no additional Round 1 exceedances were identified from the reanalyzed data. The Round 1 data quality gaps are presented in the Final Technical Memorandum, Subarea 5A Round 1 Soil Sample Results (HGL, 2012d). Table 3 summarizes the Round 1 reanalyzed activity, reanalyzed MDC values, and RTLs.

Table 3
Summary of Reanalyzed Samples

Location ID	Sample ID	Analyte Name	Reanalyzed Activity	Reanalyzed MDC	RTL
5A-00168	30124	Am-241	0.0109 UJ	0.0133	0.045
5A-00194	30236	Pu-236	0.0005	0.0448	0.045
5A-00194	30236	Pu-238	0.0065	0.0127	0.042
5A-00194	30236	Pu-244	0.0031	0.0155	0.031

Notes:
Reporting units in picocuries per gram.

3.2 Round 2 Analytical Results

Round 2 soil sampling locations where determined based on RTL exceedances detected in Round 1 soil samples. The Round 2 samples were tested for those analytes that were detected above the RTL in Round 1 samples.

Radiological trigger levels are reference soil concentrations for the radionuclides of concern for the SSFL Area IV Radiological Study. They were designed for screening analytical results of site soil and sediment collected during Round 1 sampling to inform decisions for Round 2 sampling (also called step-out sampling). Individual Round 1 analytical results were compared to RTLs and if results exceed an RTL step-out sampling was conducted. The primary purpose of the RTLs were to guide the placement of Round 2 sampling locations and will not be used to screen Round 2 sample results.

The Round 2 analytical results are documented in this technical memorandum; however, the analytical results have not been screened using the RTLs. The Subarea 5A Round 2 analytical results will be evaluated, along with Round 1 results, using Field Action Level (FAL) established specifically for the SSFL Area IV Radiological Study. The results of the evaluation will be presented in the Radiological Characterization of Soils in Area IV and NBZ report.

Figure 1 presents the locations of the soil samples collected during the Round 1 and Round 2 sampling events. A summary of the Round 2 analytical results is provided in Table A.2.

4.0 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

In addition to the environmental samples collected, quality control samples were collected as described in the QAPP (HGL, 2012c). The results of the quality control samples collected and their effect on data usability are described in the following subsections.

4.1 Field Duplicates

Field duplicate soil samples were collected at a frequency of 1 per 20 samples (5 percent). A total of four field duplicate samples were collected during the Round 2 sampling event. The field duplicate evaluation criterion includes an additional 1σ uncertainty factor of 10 percent to allow for heterogeneity of co-located, but non-homogenized, field samples.

The comparability of a field duplicate result to that of the original sample is assessed by evaluating the Z-score (Z_{DUP}). The Z-score is a statistical test that indicates how many standard deviations an observation is from the expected value. The Z-score is defined in the QAPP (HGL, 2012c), and the Z_{DUP} is calculated as follows:

$$Z_{DUP} = \frac{|X_s - X_d|}{\sqrt{{u_s}^2 + {u_d}^2}}$$

where:

Xs	=	activity of the sample
Xd	=	activity of the duplicate
u_s	=	combined standard (1σ) uncertainty of the sample
u_d	=	combined standard (1σ) uncertainty of the duplicate

Higher Z_{DUP} scores indicate greater disparity between the sample and the duplicate results. A Z_{DUP} score of 2.0, for example, indicates that the duplicate result differs from the sample result by twice the overall uncertainty of the two results. By extension, a Z_{DUP} score of 1.96 (the warning level) indicates that the two results are statistically equivalent, at the 95 percent confidence interval. A Z_{DUP} score of 2.58 (the exceedance level) indicates that the two results are statistically equivalent, at the 99 percent confidence interval.

A Z_{DUP} evaluation is performed on each paired set of analytes for which parent and duplicate data are reported. This quality assurance/quality control assessment is performed on the validated laboratory results approved and accepted by the project, and recorded in the project database as of September 19, 2012. Subsequent modifications to the approved data or the project database may not be reflected in this assessment.

Round 2 field duplicate sample data includes 122 individual radionuclide results from 61 sample/duplicate paired results. Those results included several analytes that were subsequently removed from consideration and, thus, were not evaluated. In addition, any individual radionuclide results that were rejected by data validation were removed from consideration. Finally, analytes that are simply inferred from previously reported results, such as yttrium-90, which is inferred from the reported Sr-90 results, are considered redundant and have also been removed from consideration.

The Z_{DUP} evaluation of the remaining 51 qualified data pairs follows:

- 49 Z_{DUP} evaluation results (96.1 percent) were within the expected 95 percent confidence interval for this evaluation, with Z_{DUP} less than 1.96;
- One Z_{DUP} evaluation result (2.0 percent) was between the 95 percent and 99 percent confidence interval with a Z_{DUP} at or above 1.96, but below 2.58;
- One Z_{DUP} evaluation result (2.0 percent) exceeded the 99 percent confidence interval, with a Z_{DUP} value at or above 2.58.

The Z_{DUP} statistical test predicts that, in a homogeneous sample/duplicate pairing, 4 percent of reported Z_{DUP} scores (approximately two Z_{DUP} evaluation results in this Z_{DUP} set) will be in the "warning" range between 1.96 and 2.58. In addition, 1 percent (less than one Z_{DUP} evaluation result in this Z_{DUP} set) is expected to exceed a Z_{DUP} score of 2.58. In an exceptionally small dataset such as this, the single exceedance is not considered to be statistically unexpected.

A review of the Z_{DUP} "warnings" and "exceedances," and the associated laboratory data, has been conducted and the following observations are made regarding the collection and analysis of field duplicate samples. The single Z_{DUP} score in the "warning" range, between 1.96 and 2.58, and the single Z_{DUP} "exceedance" are within the expected frequency and magnitude and do not appear to represent a data quality excursion. A summary of the parent and associated duplicate sample results is provided Table A.3.

4.2 Equipment Rinsate and Source Water Blanks

Equipment rinsate blanks were collected at a frequency of one per day for each type of sampling equipment used per field team. Equipment rinsate blanks were collected in accordance with the Final FSP for Soil Sampling (HGL, 2012a) and the Final QAPP (HGL, 2012c). A total of 20 rinsate samples and one source water sample were collected during the Round 2 sampling event. Each sample was tested for isotopic uranium (U), as a surrogate indicator of cross contamination. Any results that were rejected for laboratory quality reasons would have been removed from consideration, as in the evaluation of field duplicate samples. In this dataset, however, no sample results were rejected. Rinsate and source water samples also were analyzed for tritium if it was included in the analytical suite for samples collected that day.

This equipment rinsate assessment was performed on the validated laboratory results, approved and accepted by the project data manager, and recorded in the project database as of September 19, 2012. Subsequent modifications to the approved data or the project database may not be reflected in this assessment.

In all cases, the samples were analyzed by the laboratory as received and the Total activity is reported.

Round 2 rinsate and source water samples include 124 Total activity results, from which 62 data pairs were evaluated by Z-score duplicate comparison. The Z_{DUP} scores are summarized below.

- 62 Z_{DUP} evaluation results (100 percent) were within the expected 95 percent confidence interval for this evaluation, with Z_{DUP} less than 1.96;
- Zero Z_{DUP} evaluation results (0.0 percent) were between the 95 percent and 99 percent confidence interval with Z_{DUP} at or above 1.96, but below 2.58;
- Zero Z_{DUP} evaluation results (0.0 percent) exceeded the 99 percent confidence interval, with Z_{DUP} values at or above 2.58.

As with the field duplicates, the Z_{DUP} statistical test predicts that approximately 4 percent of reported Z_{DUP} scores (approximately two results in this Z_{DUP} set) will be in the range between 1.96 and 2.58. Likewise, approximately 1 percent of reported Z_{DUP} scores (approximately one result in this Z_{DUP} set) are expected to exceed 2.58. In a sample population of this size, the absence of Z_{DUP} scores in the warning and exceedance ranges is not unexpected.

The evaluation of equipment blank results indicates that the decontamination of the field sampling equipment is acceptable and that there is no evidence of sample cross contamination from the sampling equipment that would adversely affect the quality or usability of the reported field sample data. A summary of the rinsate and source water blank analytical results are provided in Table A.4.

5.0 CONCLUSIONS

The Round 2 analytical results are documented in this technical memorandum; however, the analytical results have not been screened using the RTLs. Radiological trigger levels were reference soil concentrations designed to be used as a decision making tool to guide the placement of Round 2 step-out sampling locations. No additional step-out sampling will be conducted as part of the EPA's SSFL Area IV Study; therefore, there is no technical reason to compare the data to RTLs.

The Subarea 5A Round 1 and Round 2 analytical results will be evaluated using FALs established specifically for the SSFL Area IV Radiological Study. The results of the evaluation will be presented Radiological Characterization of Soils in Area IV and NBZ report.

6.0 REFERENCES

Department of Toxic Substances Control, 2010. Administrative Order On Consent For Remedial Action, Santa Susana Field Laboratory, Simi Hills, Ventura County, California. December.

HydroGeoLogic, Inc., 2012a. Final Field Sampling Plan for Soil Sampling, Area IV Radiological Study, Santa Susana Field Laboratory, Ventura County, California. March.

HydroGeoLogic, Inc., 2012b. Subarea 5A Round 2 Addendum to the Final Field Sampling Plan for Soil Sampling, Area IV Radiological Study, Santa Susana Field Laboratory, Ventura County, California. March.

HydroGeoLogic, Inc., 2012c. Final Quality Assurance Project Plan for Soil Sampling, Area IV Radiological Study, Santa Susana Field Laboratory, Ventura County, California. March.

HydroGeoLogic, Inc., 2012d. Final Technical Memorandum, Subarea 5A Round 1 Soil Sample Results, Santa Susana Field Laboratory, Area IV Radiological Study. August.

LIST OF TABLES

FIGURE LIST

LIST OF ATTACHMENTS

This page was intentionally left blank.

FIGURE

This page was intentionally left blank.

Figure 1
Subarea 5A Sample Locations
Round 1 and Round 2
Santa Susana Field Laboratory

U.S. EPA Region 9

Kinetics Experiment Water Boiler

L85 Experimentation Reactor Building 4093

Former Building 4023

Former Building 4005

Building 4029

Heavy Metal Likely Remediation Zone

Legend

Soil Sample Locations

- Round 1 - Drainage
- Round 1 - Surface Subsurface
- Round 1 - Subsurface
- Round 2 - Surface Subsurface

Likely Remediation Zones

- Chemical (as of 5/2012)
- Subareas

Structures

- Existing
- Removed

- Roads
- Approximate Drainage Pathways
- 20-foot elevation contours

N

0 50 100 200
Feet

Y:\Santa_Susana\EP9038\Soil_Sampling\Subarea5A\Round2_TechMemo\5A_R2_TM_Plate1.mxd
11/20/2012 pbillock

HGL HydroGeoLogic, Inc

ATTACHMENT 1

Tables

This page was intentionally left blank.

LIST OF ATTACHMENT TABLES

This page was intentionally left blank.

Table A.1
Boring Log Summary
Subarea 5A, Round 2

Sample Location	Surface Collection Interval (ft bgs)	Subsurface Collection Interval (ft bgs)	Soil Description	Total Depth (ft bgs)	Refusal Depth (ft bgs)	Notes/Comments	Northing[1]	Easting[1]
5A-00262	0.0-0.5	NA	SM	1.17	1.17	Refusal on bedrock.	1,907,975.12	6,347,220.90
5A-00263	0.0-0.5	1-3.5	SM/ML/SP	3.50	3.50	Refusal on bedrock.	1,907,958.99	6,347,202.96
5A-00264	0.0-0.5	1-5	SM	8.50	8.50	Fill to 2.0 ft bgs, refusal on bedrock.	1,907,942.11	6,347,213.92
5A-00265	0.0-0.5	1-5	SM	7.50	7.50	Refusal on bedrock.	1,907,956.42	6,347,232.41
5A-00266	0.17-0.67	1-5	SM/ML/SP	7.00	7.00	Fill to 2.8 ft bgs, refusal on bedrock.	1,907,765.16	6,346,899.27
5A-00267	0.17-0.67	1-5	SM/SW/ML	5.00	5.00	Fill to 1.75 ft bgs, refusal on bedrock.	1,907,748.32	6,346,879.45
5A-00268	0.0-0.5	1-5	SM/SP	8.50	8.50	Fill to 6.0 ft bgs, refusal on bedrock.	1,907,733.50	6,346,890.84
5A-00269	0.17-0.67	1-5	SM/ML/SP	10.00	NA	Fill to 1.0 ft bgs, target depth reached.	1,907,719.20	6,346,905.19
5A-00270	0.17-0.67	1-5	SM/ML/SM	10.00	NA	Fill to 3.2 ft bgs, target depth reached.	1,907,735.33	6,346,922.89
5A-00271	0.0-0.5	1-5	SM/ML	6.50	6.50	Fill to 2.5 ft bgs, refusal on bedrock.	1,907,750.45	6,346,911.76
5A-00272	0.0-0.5	1-2.75	SM	2.75	2.75	Fill to 2.75 ft bgs, refusal on bedrock.	1,908,241.28	6,347,563.68
5A-00273	0.0-0.5	NA	SM	0.50	0.50	Fill to 0.5 ft bgs, refusal on bedrock.	1,908,221.39	6,347,562.49
5A-00274	0.0-0.5	1-5	SM/SP	10.00	NA	Fill to 3.0 ft bgs, target depth reached.	1,908,219.42	6,347,583.68
5A-00275	0.3-0.8	1-4.33	SM/SP	4.33	4.33	Fill to 4.33 ft bgs, refusal on bedrock.	1,908,303.35	6,347,620.80
5A-00276	0.0-0.5	1-3.75	SM	3.75	3.75	Fill to 3.0 ft bgs, refusal on bedrock.	1,908,289.28	6,347,620.09
5A-00277	0.3-0.8	1-4	SM	4.00	4.00	Fill to 4.0 ft bgs, refusal on bedrock .	1,908,277.67	6,347,606.31
5A-00278	0.0-0.5	1-3.75	ML/SM/SW/SP	3.75	3.75	Fill to 2.5 ft bgs, refusal on bedrock.	1,908,160.89	6,348,187.04
5A-00279	0.0-0.5	1-4	ML/SP	4.00	4.00	Refusal on bedrock.	1,908,149.64	6,348,165.30
5A-00280	0.0-0.5	1-2.5	ML/SM/SP	2.50	2.50	Refusal on bedrock.	1,908,131.72	6,348,178.17

U.S. EPA Region 9

Table A.1
Boring Log Summary
Subarea 5A, Round 2

Sample Location	Surface Collection Interval (ft bgs)	Subsurface Collection Interval (ft bgs)	Soil Description	Total Depth (ft bgs)	Refusal Depth (ft bgs)	Notes/Comments	Northing[1]	Easting[1]
5A-00281	0.0-0.5	1-3.75	ML	3.75	3.75	Refusal on bedrock.	1,908,142.42	6,348,199.81
5A-00282	0.0-0.5	1-3.0	SM	3.00	3.00	Refusal on bedrock.	1,907,194.01	6,347,701.90
5A-00283	0.0-0.5	1-3.67	SM	3.67	3.67	Refusal on bedrock.	1,907,190.79	6,347,686.26
5A-00284	0.0-0.5	1-5	SM/SP	7.00	7.00	Refusal on bedrock.	1,907,173.09	6,347,667.09
5A-00285	0.25-0.75	1-5	SM/ML	6.17	6.17	Fill to 1.5 ft bgs, refusal on bedrock.	1,907,764.65	6,346,876.65
5A-00286	0.2-0.7	1-5	SM/ML	8.50	8.50	Fill to 2.0 ft bgs, refusal on bedrock.	1,907,717.50	6,346,931.18
5A-00287	0.0-0.5	1-5	ML/CL/SW	5.00	5.00	Fill to 3.75 ft bgs, refusal on bedrock.	1,908,195.82	6,348,170.56
5A-00288	0.0-0.5	1-3	ML/SP	3.00	3.00	Fill to 0.8 ft bgs, refusal on bedrock.	1,908,180.67	6,348,186.88

Notes:

[1]Northing and easting measured using NAD83 SPZ5 US Feet

bgs - below ground surface

CL - clay

ft - feet

ML - silt

NA - not applicable

SM - silty sand

SP - poorly graded sand

SW - well graded sand

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00262	30445	Ni-59	3.75 J	0.578	0.654	0.00 - 0.50
5A-00263	30447	Ni-59	0.117 U J	1.42	0.403	0.00 - 0.50
5A-00263	30448	Ni-59	-0.186 U J	0.504	0.155	1.00 - 3.50
5A-00264	30449	Ni-59	-0.208 U J	0.541	0.166	0.00 - 0.50
5A-00264	30450	Ni-59	0.126 U J	1.29	0.367	1.00 - 5.00
5A-00265	30451	Ni-59	-0.195 U J	1.35	0.396	0.00 - 0.50
5A-00265	30452	Ni-59	0.872 J	0.561	0.455	1.00 - 5.00
5A-00266	30453	Ac-227	-0.108 U	0.181	0.0612	0.17 - 0.67
5A-00266	30453	Bi-212	0.849	0.117	0.0768	0.17 - 0.67
5A-00266	30453	Bi-214	0.85	0.0263	0.0419	0.17 - 0.67
5A-00266	30453	Cd-113m	6.36 U	121	37.5	0.17 - 0.67
5A-00266	30453	Co-60	-0.0039 U	0.0153	0.0046	0.17 - 0.67
5A-00266	30453	Cs-134	-0.0017 U	0.0129	0.0044	0.17 - 0.67
5A-00266	30453	Cs-137	0.0097	0.0164	0.0058	0.17 - 0.67
5A-00266	30453	Eu-152	-0.0249 U	0.0431	0.0165	0.17 - 0.67
5A-00266	30453	Eu-154	-0.0471 U	0.0842	0.0286	0.17 - 0.67
5A-00266	30453	Eu-155	0.127 SK	0.0601	0.0288	0.17 - 0.67
5A-00266	30453	Ho-166m	-0.0068 U	0.0235	0.0072	0.17 - 0.67
5A-00266	30453	K-40	19.5	0.111	1.05	0.17 - 0.67
5A-00266	30453	Na-22	0.003 U	0.018	0.0052	0.17 - 0.67
5A-00266	30453	Nb-94	-0.0008 U	0.0137	0.0041	0.17 - 0.67
5A-00266	30453	Np-236	0.0174 JSK	0.0339	0.011	0.17 - 0.67
5A-00266	30453	Np-239	0.0364 U	0.123	0.0376	0.17 - 0.67
5A-00266	30453	Pa-231	-0.436 U	0.738	0.25	0.17 - 0.67
5A-00266	30453	Pb-212	1.33	0.0307	0.0848	0.17 - 0.67
5A-00266	30453	Pb-214	0.967	0.032	0.049	0.17 - 0.67
5A-00266	30453	Sb-125	-0.0004 U	0.0407	0.0124	0.17 - 0.67
5A-00266	30453	Sn-126	0.0034 U	0.0157	0.0046	0.17 - 0.67
5A-00266	30453	Th-234	1.41	0.255	0.152	0.17 - 0.67
5A-00266	30453	Tl-208	0.395	0.0146	0.0232	0.17 - 0.67
5A-00266	30453	Tm-171	0.668 U	10.7	3.74	0.17 - 0.67
5A-00266	30454	Ac-227	-0.127 U	0.225	0.0748	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00266	30454	Bi-212	0.829	0.155	0.0834	1.00 - 5.00
5A-00266	30454	Bi-214	1.09	0.0351	0.0549	1.00 - 5.00
5A-00266	30454	Cd-113m	-4.78 U	154	49.7	1.00 - 5.00
5A-00266	30454	Co-60	0.0021 U	0.0214	0.0062	1.00 - 5.00
5A-00266	30454	Cs-134	-0.0046 U	0.017	0.006	1.00 - 5.00
5A-00266	30454	Cs-137	0.0092 U	0.0205	0.0071	1.00 - 5.00
5A-00266	30454	Eu-152	-0.0512 U J	0.0543	0.0222	1.00 - 5.00
5A-00266	30454	Eu-154	0.0081 U J	0.118	0.0341	1.00 - 5.00
5A-00266	30454	Eu-155	0.0752 SK	0.0768	0.0284	1.00 - 5.00
5A-00266	30454	Ho-166m	0.005 U	0.0322	0.0095	1.00 - 5.00
5A-00266	30454	K-40	21.4	0.157	1.17	1.00 - 5.00
5A-00266	30454	Na-22	-0.0176 U J	0.0232	0.0083	1.00 - 5.00
5A-00266	30454	Nb-94	0.0073 U	0.0187	0.0057	1.00 - 5.00
5A-00266	30454	Np-236	0.0184 U	0.0435	0.014	1.00 - 5.00
5A-00266	30454	Np-239	0.0281 U	0.154	0.0459	1.00 - 5.00
5A-00266	30454	Pa-231	-0.0585 U	0.927	0.301	1.00 - 5.00
5A-00266	30454	Pb-212	1.41	0.0387	0.0852	1.00 - 5.00
5A-00266	30454	Pb-214	1.2	0.0405	0.0571	1.00 - 5.00
5A-00266	30454	Sb-125	0.0242 U	0.0539	0.0171	1.00 - 5.00
5A-00266	30454	Sn-126	0.0008 U	0.0201	0.006	1.00 - 5.00
5A-00266	30454	Th-234	1.67	0.348	0.183	1.00 - 5.00
5A-00266	30454	Tl-208	0.426	0.0196	0.0263	1.00 - 5.00
5A-00266	30454	Tm-171	-9.11 U	16.8	6.22	1.00 - 5.00
5A-00267	30455	Ac-227	-0.129 U J	0.172	0.0624	0.17 - 0.67
5A-00267	30455	Bi-212	0.637	0.142	0.0742	0.17 - 0.67
5A-00267	30455	Bi-214	0.993	0.0323	0.0489	0.17 - 0.67
5A-00267	30455	Cd-113m	28.9 U	117	36.2	0.17 - 0.67
5A-00267	30455	Co-60	-0.0036 U	0.0198	0.0058	0.17 - 0.67
5A-00267	30455	Cs-134	-0.0065 U	0.0156	0.0057	0.17 - 0.67
5A-00267	30455	Cs-137	0.002 U	0.0203	0.0061	0.17 - 0.67
5A-00267	30455	Eu-152	0.0087 U	0.0456	0.0137	0.17 - 0.67
5A-00267	30455	Eu-154	-0.0698 U	0.11	0.0378	0.17 - 0.67

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00267	30455	Eu-155	0.0968 SK	0.0519	0.0265	0.17 - 0.67
5A-00267	30455	Ho-166m	0.0032 U	0.0299	0.0085	0.17 - 0.67
5A-00267	30455	K-40	18.9	0.16	1.04	0.17 - 0.67
5A-00267	30455	Na-22	0.0072 U	0.0238	0.0071	0.17 - 0.67
5A-00267	30455	Nb-94	-0.0024 U	0.0169	0.0052	0.17 - 0.67
5A-00267	30455	Np-236	-0.0012 U	0.0296	0.0087	0.17 - 0.67
5A-00267	30455	Np-239	0.0252 U	0.114	0.035	0.17 - 0.67
5A-00267	30455	Pa-231	-0.227 U	0.734	0.236	0.17 - 0.67
5A-00267	30455	Pb-212	1.14	0.0299	0.0638	0.17 - 0.67
5A-00267	30455	Pb-214	1.04	0.0319	0.0498	0.17 - 0.67
5A-00267	30455	Sb-125	-0.0087 U	0.0434	0.013	0.17 - 0.67
5A-00267	30455	Sn-126	-0.0023 U	0.0188	0.0058	0.17 - 0.67
5A-00267	30455	Th-234	1.54	0.21	0.126	0.17 - 0.67
5A-00267	30455	Tl-208	0.345	0.0184	0.0222	0.17 - 0.67
5A-00267	30455	Tm-171	0.178 U	6.62	2.29	0.17 - 0.67
5A-00267	30456	Ac-227	-0.0139 U	0.207	0.0639	1.00 - 5.00
5A-00267	30456	Bi-212	0.612	0.137	0.0757	1.00 - 5.00
5A-00267	30456	Bi-214	0.716	0.0319	0.037	1.00 - 5.00
5A-00267	30456	Cd-113m	-1.48 U	139	42.9	1.00 - 5.00
5A-00267	30456	Co-60	-0.0039 U	0.0194	0.0058	1.00 - 5.00
5A-00267	30456	Cs-134	-0.0019 U	0.0156	0.0053	1.00 - 5.00
5A-00267	30456	Cs-137	-0.001 U	0.0186	0.0054	1.00 - 5.00
5A-00267	30456	Eu-152	-0.0036 U	0.0522	0.017	1.00 - 5.00
5A-00267	30456	Eu-154	0.0528 U	0.11	0.034	1.00 - 5.00
5A-00267	30456	Eu-155	0.0265 U	0.0785	0.0239	1.00 - 5.00
5A-00267	30456	Ho-166m	0.0017 U	0.0288	0.0084	1.00 - 5.00
5A-00267	30456	K-40	21.6	0.156	1.35	1.00 - 5.00
5A-00267	30456	Na-22	0.0013 U	0.0245	0.0072	1.00 - 5.00
5A-00267	30456	Nb-94	0.0019 U	0.0163	0.0047	1.00 - 5.00
5A-00267	30456	Np-236	0.002 U	0.0413	0.0122	1.00 - 5.00
5A-00267	30456	Np-239	0.0058 U	0.14	0.0427	1.00 - 5.00
5A-00267	30456	Pa-231	-0.363 U	0.845	0.28	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00267	30456	Pb-212	1.19	0.0351	0.0793	1.00 - 5.00
5A-00267	30456	Pb-214	0.813	0.0361	0.0434	1.00 - 5.00
5A-00267	30456	Sb-125	-0.0032 U	0.0463	0.0138	1.00 - 5.00
5A-00267	30456	Sn-126	0.0079 U	0.0182	0.0055	1.00 - 5.00
5A-00267	30456	Th-234	1.39	0.337	0.184	1.00 - 5.00
5A-00267	30456	Tl-208	0.362	0.0174	0.0221	1.00 - 5.00
5A-00267	30456	Tm-171	-14.4 U	19.4	7.4	1.00 - 5.00
5A-00268	30457	Ac-227	-0.0743 U	0.181	0.0594	0.00 - 0.50
5A-00268	30457	Bi-212	0.906	0.116	0.0776	0.00 - 0.50
5A-00268	30457	Bi-214	0.882	0.0291	0.0429	0.00 - 0.50
5A-00268	30457	Cd-113m	23.4 U	119	36.9	0.00 - 0.50
5A-00268	30457	Co-60	0.005 U	0.0169	0.0048	0.00 - 0.50
5A-00268	30457	Cs-134	0.0049 U	0.0141	0.0049	0.00 - 0.50
5A-00268	30457	Cs-137	-0.0012 U	0.0173	0.0053	0.00 - 0.50
5A-00268	30457	Eu-152	0.119 JZ	0.053	0.033	0.00 - 0.50
5A-00268	30457	Eu-154	-0.0179 U	0.0912	0.0276	0.00 - 0.50
5A-00268	30457	Eu-155	0.105 SK	0.0607	0.0273	0.00 - 0.50
5A-00268	30457	Ho-166m	0.0074 U	0.0259	0.0076	0.00 - 0.50
5A-00268	30457	K-40	20.9	0.126	1.13	0.00 - 0.50
5A-00268	30457	Na-22	-0.0095 U	0.019	0.0061	0.00 - 0.50
5A-00268	30457	Nb-94	0.0059 U	0.015	0.0045	0.00 - 0.50
5A-00268	30457	Np-236	-0.0112 U	0.0337	0.0104	0.00 - 0.50
5A-00268	30457	Np-239	0.0053 U	0.121	0.0371	0.00 - 0.50
5A-00268	30457	Pa-231	-0.0622 U	0.753	0.219	0.00 - 0.50
5A-00268	30457	Pb-212	1.3	0.0323	0.0746	0.00 - 0.50
5A-00268	30457	Pb-214	0.992	0.0318	0.0469	0.00 - 0.50
5A-00268	30457	Sb-125	-0.016 U	0.0398	0.0126	0.00 - 0.50
5A-00268	30457	Sn-126	-0.0034 U	0.0165	0.0049	0.00 - 0.50
5A-00268	30457	Th-234	1.46	0.265	0.152	0.00 - 0.50
5A-00268	30457	Tl-208	0.395	0.0156	0.0228	0.00 - 0.50
5A-00268	30457	Tm-171	2.7 U	12.1	3.92	0.00 - 0.50
5A-00268	30458	Ac-227	0.0151 U	0.182	0.0532	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00268	30458	Bi-212	0.761	0.132	0.0835	1.00 - 5.00
5A-00268	30458	Bi-214	0.872	0.0306	0.0434	1.00 - 5.00
5A-00268	30458	Cd-113m	-26.6 U	121	37.5	1.00 - 5.00
5A-00268	30458	Co-60	0.0022 U	0.0178	0.0052	1.00 - 5.00
5A-00268	30458	Cs-134	0.004 U	0.0147	0.0049	1.00 - 5.00
5A-00268	30458	Cs-137	0.007 U	0.0183	0.0055	1.00 - 5.00
5A-00268	30458	Eu-152	0.0772 JZ	0.0501	0.0247	1.00 - 5.00
5A-00268	30458	Eu-154	-0.0004 U	0.101	0.0293	1.00 - 5.00
5A-00268	30458	Eu-155	0.0839 SK	0.0622	0.0273	1.00 - 5.00
5A-00268	30458	Ho-166m	0.0095 U	0.0273	0.0082	1.00 - 5.00
5A-00268	30458	K-40	19.5	0.128	1.06	1.00 - 5.00
5A-00268	30458	Na-22	-0.0007 U	0.0214	0.0064	1.00 - 5.00
5A-00268	30458	Nb-94	-0.0008 U	0.0153	0.0045	1.00 - 5.00
5A-00268	30458	Np-236	-0.0054 U	0.034	0.0103	1.00 - 5.00
5A-00268	30458	Np-239	-0.0281 U	0.123	0.0366	1.00 - 5.00
5A-00268	30458	Pa-231	0.0361 U	0.757	0.252	1.00 - 5.00
5A-00268	30458	Pb-212	1.2	0.0312	0.0673	1.00 - 5.00
5A-00268	30458	Pb-214	1.02	0.0317	0.0482	1.00 - 5.00
5A-00268	30458	Sb-125	-0.0401 U J	0.0418	0.0163	1.00 - 5.00
5A-00268	30458	Sn-126	-0.0043 U	0.0166	0.0051	1.00 - 5.00
5A-00268	30458	Th-234	1.61	0.274	0.167	1.00 - 5.00
5A-00268	30458	Tl-208	0.38	0.0166	0.0223	1.00 - 5.00
5A-00268	30458	Tm-171	1.64 U	13.7	4.43	1.00 - 5.00
5A-00269	30459	Ac-227	0.107 U	0.23	0.0727	0.17 - 0.67
5A-00269	30459	Bi-212	0.827	0.149	0.0856	0.17 - 0.67
5A-00269	30459	Bi-214	1.06	0.033	0.0518	0.17 - 0.67
5A-00269	30459	Cd-113m	-81.5 U	152	53	0.17 - 0.67
5A-00269	30459	Co-60	-0.002 U	0.0192	0.0056	0.17 - 0.67
5A-00269	30459	Cs-134	0.0138 JSK	0.017	0.0064	0.17 - 0.67
5A-00269	30459	Cs-137	-0.0073 U	0.019	0.006	0.17 - 0.67
5A-00269	30459	Eu-152	0.0253 U	0.0564	0.0254	0.17 - 0.67
5A-00269	30459	Eu-154	0.0376 U	0.109	0.0332	0.17 - 0.67

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00269	30459	Eu-155	0.0354 U	0.0874	0.0269	0.17 - 0.67
5A-00269	30459	Ho-166m	-0.0122 U	0.0287	0.0092	0.17 - 0.67
5A-00269	30459	K-40	21.1	0.147	1.15	0.17 - 0.67
5A-00269	30459	Na-22	-0.0058 U	0.0219	0.0066	0.17 - 0.67
5A-00269	30459	Nb-94	0 U	0.0166	0.0049	0.17 - 0.67
5A-00269	30459	Np-236	-0.0091 U	0.0465	0.014	0.17 - 0.67
5A-00269	30459	Np-239	0.0138 U	0.155	0.0465	0.17 - 0.67
5A-00269	30459	Pa-231	-0.223 U	0.952	0.324	0.17 - 0.67
5A-00269	30459	Pb-212	1.34	0.0381	0.0786	0.17 - 0.67
5A-00269	30459	Pb-214	1.15	0.0395	0.055	0.17 - 0.67
5A-00269	30459	Sb-125	0.0045 U	0.0506	0.0154	0.17 - 0.67
5A-00269	30459	Sn-126	-0.0056 U	0.0188	0.0058	0.17 - 0.67
5A-00269	30459	Th-234	1.93 J	0.457	0.498	0.17 - 0.67
5A-00269	30459	Tl-208	0.395	0.0185	0.0245	0.17 - 0.67
5A-00269	30459	Tm-171	-13.2 U	19.3	6.82	0.17 - 0.67
5A-00269	30460	Ac-227	0.0027 U	0.185	0.0539	1.00 - 5.00
5A-00269	30460	Bi-212	0.96	0.121	0.0855	1.00 - 5.00
5A-00269	30460	Bi-214	1.08	0.0273	0.0508	1.00 - 5.00
5A-00269	30460	Cd-113m	-13 U	123	36.3	1.00 - 5.00
5A-00269	30460	Co-60	0.0013 U	0.016	0.0047	1.00 - 5.00
5A-00269	30460	Cs-134	0.0047 U	0.0138	0.0048	1.00 - 5.00
5A-00269	30460	Cs-137	0.0038 U	0.0153	0.0053	1.00 - 5.00
5A-00269	30460	Eu-152	-0.0008 U	0.0448	0.015	1.00 - 5.00
5A-00269	30460	Eu-154	-0.0663 U J	0.0864	0.0311	1.00 - 5.00
5A-00269	30460	Eu-155	0.0624 SK	0.0686	0.0223	1.00 - 5.00
5A-00269	30460	Ho-166m	-0.0036 U	0.0237	0.0073	1.00 - 5.00
5A-00269	30460	K-40	20.4	0.127	1.1	1.00 - 5.00
5A-00269	30460	Na-22	0.0045 U	0.0179	0.0053	1.00 - 5.00
5A-00269	30460	Nb-94	0.0119 JSK	0.0144	0.005	1.00 - 5.00
5A-00269	30460	Np-236	-0.0153 U	0.037	0.012	1.00 - 5.00
5A-00269	30460	Np-239	-0.0193 U	0.122	0.036	1.00 - 5.00
5A-00269	30460	Pa-231	-0.0754 U	0.743	0.219	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00269	30460	Pb-212	1.4	0.0313	0.0783	1.00 - 5.00
5A-00269	30460	Pb-214	1.2	0.0323	0.0558	1.00 - 5.00
5A-00269	30460	Sb-125	0.0113 U	0.0429	0.0129	1.00 - 5.00
5A-00269	30460	Sn-126	0.0007 U	0.0157	0.0048	1.00 - 5.00
5A-00269	30460	Th-234	1.94	0.306	0.176	1.00 - 5.00
5A-00269	30460	Tl-208	0.429	0.0154	0.0252	1.00 - 5.00
5A-00269	30460	Tm-171	-7.88 U	14.4	5.25	1.00 - 5.00
5A-00270	30461	Ac-227	-0.0264 U	0.165	0.049	0.17 - 0.67
5A-00270	30461	Bi-212	0.784	0.108	0.0681	0.17 - 0.67
5A-00270	30461	Bi-214	0.914	0.0249	0.0431	0.17 - 0.67
5A-00270	30461	Cd-113m	-3.88 U	110	32.3	0.17 - 0.67
5A-00270	30461	Co-60	-0.0016 U	0.0143	0.0043	0.17 - 0.67
5A-00270	30461	Cs-134	-0.0009 U	0.012	0.0042	0.17 - 0.67
5A-00270	30461	Cs-137	0.0016 U	0.0136	0.0045	0.17 - 0.67
5A-00270	30461	Eu-152	-0.0202 U	0.0392	0.0128	0.17 - 0.67
5A-00270	30461	Eu-154	-0.0643 U J	0.0772	0.0286	0.17 - 0.67
5A-00270	30461	Eu-155	0.0879 SK	0.0573	0.0264	0.17 - 0.67
5A-00270	30461	Ho-166m	-0.0022 U	0.0219	0.0064	0.17 - 0.67
5A-00270	30461	K-40	18.5	0.108	1.01	0.17 - 0.67
5A-00270	30461	Na-22	0.0037 U	0.0166	0.005	0.17 - 0.67
5A-00270	30461	Nb-94	0.0034 U	0.0127	0.0037	0.17 - 0.67
5A-00270	30461	Np-236	-0.0117 U	0.0317	0.0102	0.17 - 0.67
5A-00270	30461	Np-239	-0.0094 U	0.11	0.0321	0.17 - 0.67
5A-00270	30461	Pa-231	-0.0085 U	0.674	0.198	0.17 - 0.67
5A-00270	30461	Pb-212	1.27	0.0278	0.0714	0.17 - 0.67
5A-00270	30461	Pb-214	1.01	0.0289	0.047	0.17 - 0.67
5A-00270	30461	Sb-125	0.0019 U	0.0364	0.0108	0.17 - 0.67
5A-00270	30461	Sn-126	-0.0008 U	0.0142	0.0041	0.17 - 0.67
5A-00270	30461	Th-234	1.16	0.251	0.124	0.17 - 0.67
5A-00270	30461	Tl-208	0.402	0.0134	0.0231	0.17 - 0.67
5A-00270	30461	Tm-171	-7.8 U	10.6	4.08	0.17 - 0.67
5A-00270	30462	Ac-227	-0.023 U	0.2	0.0605	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00270	30462	Bi-212	0.834	0.119	0.0822	1.00 - 5.00
5A-00270	30462	Bi-214	1.12	0.0295	0.0528	1.00 - 5.00
5A-00270	30462	Cd-113m	-25.5 U	128	40.6	1.00 - 5.00
5A-00270	30462	Co-60	-0.0055 U	0.0167	0.0051	1.00 - 5.00
5A-00270	30462	Cs-134	0.0045 U	0.0141	0.0048	1.00 - 5.00
5A-00270	30462	Cs-137	-0.0086 U	0.0167	0.0055	1.00 - 5.00
5A-00270	30462	Eu-152	-0.0283 U	0.0466	0.018	1.00 - 5.00
5A-00270	30462	Eu-154	-0.0129 U J	0.0952	0.0336	1.00 - 5.00
5A-00270	30462	Eu-155	0.0812 SK	0.0663	0.0237	1.00 - 5.00
5A-00270	30462	Ho-166m	0.0066 U	0.0254	0.0075	1.00 - 5.00
5A-00270	30462	K-40	21.2	0.13	1.15	1.00 - 5.00
5A-00270	30462	Na-22	-0.0094 U	0.0187	0.006	1.00 - 5.00
5A-00270	30462	Nb-94	0.0089 JSK	0.0152	0.0048	1.00 - 5.00
5A-00270	30462	Np-236	-0.0111 U	0.0363	0.0114	1.00 - 5.00
5A-00270	30462	Np-239	-0.0782 U	0.13	0.0438	1.00 - 5.00
5A-00270	30462	Pa-231	-0.0346 U	0.807	0.264	1.00 - 5.00
5A-00270	30462	Pb-212	1.47	0.0337	0.0939	1.00 - 5.00
5A-00270	30462	Pb-214	1.31	0.0338	0.0642	1.00 - 5.00
5A-00270	30462	Sb-125	-0.0082 U	0.044	0.0137	1.00 - 5.00
5A-00270	30462	Sn-126	0.0074 U	0.017	0.0052	1.00 - 5.00
5A-00270	30462	Th-234	1.81	0.287	0.172	1.00 - 5.00
5A-00270	30462	Tl-208	0.448	0.0156	0.0254	1.00 - 5.00
5A-00270	30462	Tm-171	-0.883 U	11.6	4.08	1.00 - 5.00
5A-00271	30463	Ac-227	-0.0086 U	0.218	0.0652	0.00 - 0.50
5A-00271	30463	Bi-212	0.676	0.154	0.0864	0.00 - 0.50
5A-00271	30463	Bi-214	0.882	0.0328	0.0454	0.00 - 0.50
5A-00271	30463	Cd-113m	43.1 U	149	48.4	0.00 - 0.50
5A-00271	30463	Co-60	0.0052 U	0.0217	0.0063	0.00 - 0.50
5A-00271	30463	Cs-134	0.0249 JSK	0.0191	0.0085	0.00 - 0.50
5A-00271	30463	Cs-137	0.0307	0.0211	0.0098	0.00 - 0.50
5A-00271	30463	Eu-152	0.129 JZ	0.0643	0.0376	0.00 - 0.50
5A-00271	30463	Eu-154	-0.033 U	0.114	0.0346	0.00 - 0.50

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00271	30463	Eu-155	0.0463 JSK	0.0771	0.0259	0.00 - 0.50
5A-00271	30463	Ho-166m	-0.0041 U	0.0303	0.0091	0.00 - 0.50
5A-00271	30463	K-40	21.7	0.154	1.18	0.00 - 0.50
5A-00271	30463	Na-22	0.0047 U	0.0254	0.0075	0.00 - 0.50
5A-00271	30463	Nb-94	0.0009 U	0.0175	0.0052	0.00 - 0.50
5A-00271	30463	Np-236	0.0064 U	0.0409	0.0127	0.00 - 0.50
5A-00271	30463	Np-239	-0.0207 U	0.145	0.0435	0.00 - 0.50
5A-00271	30463	Pa-231	-0.0738 U	0.923	0.288	0.00 - 0.50
5A-00271	30463	Pb-212	1.17	0.0385	0.0711	0.00 - 0.50
5A-00271	30463	Pb-214	0.992	0.0379	0.0495	0.00 - 0.50
5A-00271	30463	Sb-125	-0.002 U	0.0523	0.016	0.00 - 0.50
5A-00271	30463	Sn-126	0.0066 U	0.0203	0.0061	0.00 - 0.50
5A-00271	30463	Th-234	1.37	0.332	0.178	0.00 - 0.50
5A-00271	30463	Tl-208	0.354	0.0189	0.0224	0.00 - 0.50
5A-00271	30463	Tm-171	1.84 U	16.4	5.58	0.00 - 0.50
5A-00271	30464	Ac-227	-0.043 U	0.183	0.0579	1.00 - 5.00
5A-00271	30464	Bi-212	0.783	0.123	0.0806	1.00 - 5.00
5A-00271	30464	Bi-214	1.01	0.0287	0.0479	1.00 - 5.00
5A-00271	30464	Cd-113m	13.7 U	124	38.2	1.00 - 5.00
5A-00271	30464	Co-60	-0.0007 U	0.0165	0.0048	1.00 - 5.00
5A-00271	30464	Cs-134	-0.003 U	0.0141	0.005	1.00 - 5.00
5A-00271	30464	Cs-137	-0.0063 U	0.0161	0.006	1.00 - 5.00
5A-00271	30464	Eu-152	-0.0113 U	0.0446	0.0139	1.00 - 5.00
5A-00271	30464	Eu-154	0.0276 U J	0.0944	0.0321	1.00 - 5.00
5A-00271	30464	Eu-155	0.0386 JSK	0.0646	0.0209	1.00 - 5.00
5A-00271	30464	Ho-166m	-0.0099 U	0.0243	0.0075	1.00 - 5.00
5A-00271	30464	K-40	20.9	0.127	1.13	1.00 - 5.00
5A-00271	30464	Na-22	0.005 U	0.0205	0.0059	1.00 - 5.00
5A-00271	30464	Nb-94	0.0142 JSK	0.0154	0.0054	1.00 - 5.00
5A-00271	30464	Np-236	-0.0092 U	0.0343	0.0105	1.00 - 5.00
5A-00271	30464	Np-239	0.028 U	0.123	0.038	1.00 - 5.00
5A-00271	30464	Pa-231	-0.11 U	0.767	0.225	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00271	30464	Pb-212	1.32	0.0314	0.0757	1.00 - 5.00
5A-00271	30464	Pb-214	1.13	0.0326	0.0527	1.00 - 5.00
5A-00271	30464	Sb-125	-0.0035 U	0.0414	0.0123	1.00 - 5.00
5A-00271	30464	Sn-126	0.0048 U	0.0158	0.0046	1.00 - 5.00
5A-00271	30464	Th-234	1.81	0.27	0.159	1.00 - 5.00
5A-00271	30464	Tl-208	0.406	0.0163	0.0232	1.00 - 5.00
5A-00271	30464	Tm-171	-3.29 U	12.4	4.09	1.00 - 5.00
5A-00272	30465	Sr-90	-0.0818 U	0.246	0.0608	0.00 - 0.50
5A-00272	30466	Sr-90	-0.0378 U	0.31	0.0812	1.00 - 2.75
5A-00273	30467	Sr-90	0.142	0.222	0.072	0.00 - 0.50
5A-00274	30469	Sr-90	0.0965 U	0.33	0.0974	0.00 - 0.50
5A-00274	30470	Sr-90	0.0619 U	0.257	0.0739	1.00 - 5.00
5A-00275	30471	Sr-90	0.01 U	0.158	0.0431	0.30 - 0.80
5A-00275	30472	Sr-90	0.115 U	0.299	0.0898	1.00 - 4.33
5A-00276	30473	Sr-90	-0.0661 U	0.173	0.039	0.00 - 0.50
5A-00276	30474	Sr-90	0.018 U	0.32	0.0882	1.00 - 3.75
5A-00277	30475	Sr-90	0.156	0.253	0.0804	0.30 - 0.80
5A-00277	30476	Sr-90	0.0809 U	0.252	0.074	1.00 - 4.00
5A-00278	30477	Ac-227	-0.0907 U	0.218	0.0715	0.00 - 0.50
5A-00278	30477	Bi-212	0.702	0.14	0.0696	0.00 - 0.50
5A-00278	30477	Bi-214	0.919	0.0333	0.0434	0.00 - 0.50
5A-00278	30477	Cd-113m	-109 U J	143	53.8	0.00 - 0.50
5A-00278	30477	Co-60	-0.0045 U	0.0185	0.0056	0.00 - 0.50
5A-00278	30477	Cs-134	0.001 U	0.016	0.0054	0.00 - 0.50
5A-00278	30477	Cs-137	0.595	0.019	0.0343	0.00 - 0.50
5A-00278	30477	Eu-152	0.028 J	0.0547	0.0204	0.00 - 0.50
5A-00278	30477	Eu-154	0.0088 U	0.103	0.0358	0.00 - 0.50
5A-00278	30477	Eu-155	-0.0035 U	0.0812	0.025	0.00 - 0.50
5A-00278	30477	Ho-166m	-0.0059 U	0.0273	0.0082	0.00 - 0.50
5A-00278	30477	K-40	21.3	0.135	1.33	0.00 - 0.50
5A-00278	30477	Na-22	-0.0054 U	0.0237	0.0072	0.00 - 0.50
5A-00278	30477	Nb-94	0.0074 U	0.0165	0.005	0.00 - 0.50

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00278	30477	Np-236	0.0055 U	0.0433	0.0129	0.00 - 0.50
5A-00278	30477	Np-239	0.0175 U	0.147	0.0452	0.00 - 0.50
5A-00278	30477	Pa-231	-0.388 U	0.914	0.313	0.00 - 0.50
5A-00278	30477	Pb-212	1.31	0.0371	0.0869	0.00 - 0.50
5A-00278	30477	Pb-214	0.998	0.0369	0.0516	0.00 - 0.50
5A-00278	30477	Sb-125	0.0078 U	0.0512	0.0153	0.00 - 0.50
5A-00278	30477	Sn-126	0.0053 U	0.018	0.0053	0.00 - 0.50
5A-00278	30477	Th-234	1.19 J	0.425	0.321	0.00 - 0.50
5A-00278	30477	Tl-208	0.388	0.0186	0.0236	0.00 - 0.50
5A-00278	30477	Tm-171	1.08 U	20.6	6.01	0.00 - 0.50
5A-00278	30478	Ac-227	0.0198 U	0.164	0.0503	1.00 - 3.75
5A-00278	30478	Bi-212	0.859	0.106	0.0676	1.00 - 3.75
5A-00278	30478	Bi-214	0.866	0.0242	0.041	1.00 - 3.75
5A-00278	30478	Cd-113m	3.48 U	108	36	1.00 - 3.75
5A-00278	30478	Co-60	-0.0005 U	0.0145	0.0042	1.00 - 3.75
5A-00278	30478	Cs-134	-0.0049 U	0.0119	0.0044	1.00 - 3.75
5A-00278	30478	Cs-137	-0.0071 U	0.0145	0.0048	1.00 - 3.75
5A-00278	30478	Eu-152	0.0017 U	0.04	0.0142	1.00 - 3.75
5A-00278	30478	Eu-154	-0.0558 U	0.0793	0.0279	1.00 - 3.75
5A-00278	30478	Eu-155	0.0817 SK	0.0569	0.0219	1.00 - 3.75
5A-00278	30478	Ho-166m	-0.0015 U	0.0222	0.0068	1.00 - 3.75
5A-00278	30478	K-40	20.2	0.106	1.09	1.00 - 3.75
5A-00278	30478	Na-22	-0.003 U	0.017	0.0061	1.00 - 3.75
5A-00278	30478	Nb-94	0.0033 U	0.0133	0.0041	1.00 - 3.75
5A-00278	30478	Np-236	-0.0176 U	0.0311	0.0105	1.00 - 3.75
5A-00278	30478	Np-239	0.0246 U	0.111	0.0343	1.00 - 3.75
5A-00278	30478	Pa-231	0.002 U	0.669	0.214	1.00 - 3.75
5A-00278	30478	Pb-212	1.26	0.028	0.0715	1.00 - 3.75
5A-00278	30478	Pb-214	0.95	0.0285	0.0448	1.00 - 3.75
5A-00278	30478	Sb-125	0.0007 U	0.0367	0.0108	1.00 - 3.75
5A-00278	30478	Sn-126	-0.0002 U	0.0141	0.0043	1.00 - 3.75
5A-00278	30478	Th-234	1.24	0.245	0.122	1.00 - 3.75

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00278	30478	Tl-208	0.384	0.0138	0.0219	1.00 - 3.75
5A-00278	30478	Tm-171	-9.77 U J	9.7	4.01	1.00 - 3.75
5A-00279	30479	Ac-227	-0.0981 U	0.22	0.0727	0.00 - 0.50
5A-00279	30479	Bi-212	0.756	0.131	0.0799	0.00 - 0.50
5A-00279	30479	Bi-214	0.988	0.0332	0.0481	0.00 - 0.50
5A-00279	30479	Cd-113m	-116 U J	148	56	0.00 - 0.50
5A-00279	30479	Co-60	0.0089 U	0.0197	0.0059	0.00 - 0.50
5A-00279	30479	Cs-134	0.0081 U	0.0169	0.0059	0.00 - 0.50
5A-00279	30479	Cs-137	0.794	0.0197	0.0446	0.00 - 0.50
5A-00279	30479	Eu-152	-0.0326 U	0.0553	0.0219	0.00 - 0.50
5A-00279	30479	Eu-154	-0.0764 U J	0.105	0.0376	0.00 - 0.50
5A-00279	30479	Eu-155	0.0172 U	0.0805	0.0241	0.00 - 0.50
5A-00279	30479	Ho-166m	0.0055 U	0.0286	0.0084	0.00 - 0.50
5A-00279	30479	K-40	21.2	0.145	1.32	0.00 - 0.50
5A-00279	30479	Na-22	-0.0051 U	0.0221	0.0067	0.00 - 0.50
5A-00279	30479	Nb-94	0.0029 U	0.0165	0.0048	0.00 - 0.50
5A-00279	30479	Np-236	0.0097 U	0.0432	0.013	0.00 - 0.50
5A-00279	30479	Np-239	-0.0211 U	0.147	0.0455	0.00 - 0.50
5A-00279	30479	Pa-231	0.0546 U	0.929	0.298	0.00 - 0.50
5A-00279	30479	Pb-212	1.24	0.0374	0.0822	0.00 - 0.50
5A-00279	30479	Pb-214	1.14	0.0388	0.0591	0.00 - 0.50
5A-00279	30479	Sb-125	0.0211 U	0.0521	0.0161	0.00 - 0.50
5A-00279	30479	Sn-126	-0.0125 U J	0.0173	0.006	0.00 - 0.50
5A-00279	30479	Th-234	1.39	0.37	0.182	0.00 - 0.50
5A-00279	30479	Tl-208	0.367	0.0175	0.0218	0.00 - 0.50
5A-00279	30479	Tm-171	-6.85 U	19.9	6.84	0.00 - 0.50
5A-00279	30480	Ac-227	-0.112 U	0.167	0.0564	1.00 - 4.00
5A-00279	30480	Bi-212	0.762	0.124	0.0711	1.00 - 4.00
5A-00279	30480	Bi-214	0.853	0.0277	0.0416	1.00 - 4.00
5A-00279	30480	Cd-113m	-26 U	115	34.3	1.00 - 4.00
5A-00279	30480	Co-60	0.0036 U	0.016	0.0046	1.00 - 4.00
5A-00279	30480	Cs-134	-0.0028 U	0.0133	0.0045	1.00 - 4.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00279	30480	Cs-137	-0.0006 U	0.0157	0.0052	1.00 - 4.00
5A-00279	30480	Eu-152	-0.0163 U	0.0435	0.0141	1.00 - 4.00
5A-00279	30480	Eu-154	-0.0642 U J	0.0865	0.0313	1.00 - 4.00
5A-00279	30480	Eu-155	0.0642 SK	0.0612	0.0232	1.00 - 4.00
5A-00279	30480	Ho-166m	0.0002 U	0.0245	0.0071	1.00 - 4.00
5A-00279	30480	K-40	21.2	0.115	1.17	1.00 - 4.00
5A-00279	30480	Na-22	0.0006 U	0.0195	0.0056	1.00 - 4.00
5A-00279	30480	Nb-94	0.003 U	0.0143	0.0042	1.00 - 4.00
5A-00279	30480	Np-236	-0.0081 U	0.0338	0.0104	1.00 - 4.00
5A-00279	30480	Np-239	-0.0081 U	0.119	0.0347	1.00 - 4.00
5A-00279	30480	Pa-231	0.245 U	0.749	0.224	1.00 - 4.00
5A-00279	30480	Pb-212	1.29	0.0287	0.0714	1.00 - 4.00
5A-00279	30480	Pb-214	0.938	0.0315	0.0442	1.00 - 4.00
5A-00279	30480	Sb-125	-0.0072 U	0.0414	0.0126	1.00 - 4.00
5A-00279	30480	Sn-126	0.0109 J	0.0169	0.0054	1.00 - 4.00
5A-00279	30480	Th-234	1.19	0.272	0.13	1.00 - 4.00
5A-00279	30480	Tl-208	0.388	0.0153	0.0224	1.00 - 4.00
5A-00279	30480	Tm-171	1.38 U	12.2	4.01	1.00 - 4.00
5A-00280	30481	Ac-227	-0.044 U	0.199	0.0595	0.00 - 0.50
5A-00280	30481	Bi-212	0.954	0.138	0.0831	0.00 - 0.50
5A-00280	30481	Bi-214	0.975	0.0325	0.0476	0.00 - 0.50
5A-00280	30481	Cd-113m	87.2 J	137	48.8	0.00 - 0.50
5A-00280	30481	Co-60	0.0074 U	0.0192	0.0057	0.00 - 0.50
5A-00280	30481	Cs-134	0.0049 U	0.0163	0.0055	0.00 - 0.50
5A-00280	30481	Cs-137	0.734	0.0208	0.0415	0.00 - 0.50
5A-00280	30481	Eu-152	0.0201 U	0.051	0.0188	0.00 - 0.50
5A-00280	30481	Eu-154	-0.011 U J	0.102	0.0346	0.00 - 0.50
5A-00280	30481	Eu-155	0.0411 JSK	0.0683	0.0223	0.00 - 0.50
5A-00280	30481	Ho-166m	0.0049 U	0.0287	0.0085	0.00 - 0.50
5A-00280	30481	K-40	21.6	0.129	1.17	0.00 - 0.50
5A-00280	30481	Na-22	-0.0024 U	0.0224	0.0067	0.00 - 0.50
5A-00280	30481	Nb-94	0.0095 JSK	0.0167	0.0053	0.00 - 0.50

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00280	30481	Np-236	-0.0117 U	0.0367	0.0114	0.00 - 0.50
5A-00280	30481	Np-239	0.0034 U	0.133	0.0386	0.00 - 0.50
5A-00280	30481	Pa-231	-0.0813 U	0.869	0.258	0.00 - 0.50
5A-00280	30481	Pb-212	1.34	0.0331	0.075	0.00 - 0.50
5A-00280	30481	Pb-214	1.11	0.0357	0.0527	0.00 - 0.50
5A-00280	30481	Sb-125	-0.0048 U	0.0501	0.0153	0.00 - 0.50
5A-00280	30481	Sn-126	-0.0016 U	0.018	0.0054	0.00 - 0.50
5A-00280	30481	Th-234	1.66	0.298	0.161	0.00 - 0.50
5A-00280	30481	Tl-208	0.424	0.0177	0.0256	0.00 - 0.50
5A-00280	30481	Tm-171	-3.73 U	14.7	4.86	0.00 - 0.50
5A-00280	30482	Ac-227	0.0576 U	0.173	0.0599	1.00 - 2.50
5A-00280	30482	Bi-212	0.869	0.127	0.0788	1.00 - 2.50
5A-00280	30482	Bi-214	0.745	0.0284	0.0368	1.00 - 2.50
5A-00280	30482	Cd-113m	7.7 U	115	34.4	1.00 - 2.50
5A-00280	30482	Co-60	-0.0037 U	0.0161	0.0049	1.00 - 2.50
5A-00280	30482	Cs-134	0.0034 U	0.0138	0.0047	1.00 - 2.50
5A-00280	30482	Cs-137	-0.0044 U	0.0164	0.0051	1.00 - 2.50
5A-00280	30482	Eu-152	-0.0055 U	0.0415	0.0157	1.00 - 2.50
5A-00280	30482	Eu-154	-0.0491 U	0.0873	0.0289	1.00 - 2.50
5A-00280	30482	Eu-155	0.108 SK	0.0607	0.027	1.00 - 2.50
5A-00280	30482	Ho-166m	-0.0085 U	0.025	0.0079	1.00 - 2.50
5A-00280	30482	K-40	18.8	0.116	1.02	1.00 - 2.50
5A-00280	30482	Na-22	-0.0166 U J	0.0185	0.007	1.00 - 2.50
5A-00280	30482	Nb-94	0.0052 U	0.0148	0.0045	1.00 - 2.50
5A-00280	30482	Np-236	-0.0158 U	0.0329	0.011	1.00 - 2.50
5A-00280	30482	Np-239	0.0092 U	0.118	0.0351	1.00 - 2.50
5A-00280	30482	Pa-231	-0.397 U	0.712	0.238	1.00 - 2.50
5A-00280	30482	Pb-212	1.36	0.0304	0.0831	1.00 - 2.50
5A-00280	30482	Pb-214	0.818	0.0305	0.042	1.00 - 2.50
5A-00280	30482	Sb-125	0.0074 U	0.0407	0.0118	1.00 - 2.50
5A-00280	30482	Sn-126	0.0009 U	0.0163	0.0048	1.00 - 2.50
5A-00280	30482	Th-234	1.18	0.253	0.121	1.00 - 2.50

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00280	30482	Tl-208	0.443	0.0156	0.025	1.00 - 2.50
5A-00280	30482	Tm-171	-3.8 U	10.1	3.6	1.00 - 2.50
5A-00281	30483	Ac-227	0.0136 U	0.22	0.0656	0.00 - 0.50
5A-00281	30483	Bi-212	0.652 J	0.208	0.172	0.00 - 0.50
5A-00281	30483	Bi-214	0.842	0.0339	0.0442	0.00 - 0.50
5A-00281	30483	Cd-113m	45.7 U	146	44.4	0.00 - 0.50
5A-00281	30483	Co-60	-0.0054 U	0.0193	0.006	0.00 - 0.50
5A-00281	30483	Cs-134	0.0111 JSK	0.0168	0.0061	0.00 - 0.50
5A-00281	30483	Cs-137	0.795	0.0205	0.0485	0.00 - 0.50
5A-00281	30483	Eu-152	-0.0304 U	0.0531	0.0193	0.00 - 0.50
5A-00281	30483	Eu-154	-0.037 U	0.105	0.0324	0.00 - 0.50
5A-00281	30483	Eu-155	0.0517 SK	0.0715	0.0232	0.00 - 0.50
5A-00281	30483	Ho-166m	0.0003 U	0.0281	0.0083	0.00 - 0.50
5A-00281	30483	K-40	20.9	0.141	1.14	0.00 - 0.50
5A-00281	30483	Na-22	-0.0039 U	0.0229	0.0069	0.00 - 0.50
5A-00281	30483	Nb-94	0.0098 JSK	0.0164	0.0052	0.00 - 0.50
5A-00281	30483	Np-236	-0.0197 U	0.0393	0.0132	0.00 - 0.50
5A-00281	30483	Np-239	-0.004 U	0.144	0.0429	0.00 - 0.50
5A-00281	30483	Pa-231	-0.229 U	0.911	0.281	0.00 - 0.50
5A-00281	30483	Pb-212	1.26	0.0357	0.0758	0.00 - 0.50
5A-00281	30483	Pb-214	1.04	0.0388	0.0506	0.00 - 0.50
5A-00281	30483	Sb-125	-0.003 U	0.0516	0.0159	0.00 - 0.50
5A-00281	30483	Sn-126	0.002 U	0.0186	0.0055	0.00 - 0.50
5A-00281	30483	Th-234	1.24	0.322	0.159	0.00 - 0.50
5A-00281	30483	Tl-208	0.371	0.0182	0.0231	0.00 - 0.50
5A-00281	30483	Tm-171	-11.6 U	15.2	5.99	0.00 - 0.50
5A-00281	30484	Ac-227	0.0539 U	0.222	0.0776	1.00 - 3.75
5A-00281	30484	Bi-212	0.941	0.155	0.0944	1.00 - 3.75
5A-00281	30484	Bi-214	1.39	0.0367	0.0654	1.00 - 3.75
5A-00281	30484	Cd-113m	37.4 U	148	46.1	1.00 - 3.75
5A-00281	30484	Co-60	-0.0149 U J	0.0182	0.0066	1.00 - 3.75
5A-00281	30484	Cs-134	0.0013 U	0.0178	0.0062	1.00 - 3.75

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00281	30484	Cs-137	-0.0169 U J	0.0198	0.0075	1.00 - 3.75
5A-00281	30484	Eu-152	-0.0241 U	0.053	0.0168	1.00 - 3.75
5A-00281	30484	Eu-154	-0.099 U J	0.111	0.0422	1.00 - 3.75
5A-00281	30484	Eu-155	0.0292 U	0.0749	0.023	1.00 - 3.75
5A-00281	30484	Ho-166m	-0.0111 U	0.0299	0.0092	1.00 - 3.75
5A-00281	30484	K-40	25.3	0.166	1.37	1.00 - 3.75
5A-00281	30484	Na-22	-0.0114 U	0.0244	0.0077	1.00 - 3.75
5A-00281	30484	Nb-94	-0.0002 U	0.0179	0.0052	1.00 - 3.75
5A-00281	30484	Np-236	-0.0151 U	0.0398	0.0124	1.00 - 3.75
5A-00281	30484	Np-239	-0.0231 U	0.146	0.0454	1.00 - 3.75
5A-00281	30484	Pa-231	-0.566 U	0.893	0.296	1.00 - 3.75
5A-00281	30484	Pb-212	1.64	0.0379	0.0935	1.00 - 3.75
5A-00281	30484	Pb-214	1.58	0.0385	0.0734	1.00 - 3.75
5A-00281	30484	Sb-125	0.0269 JSK	0.0513	0.016	1.00 - 3.75
5A-00281	30484	Sn-126	0.0001 U	0.0201	0.0058	1.00 - 3.75
5A-00281	30484	Th-234	1.91	0.328	0.169	1.00 - 3.75
5A-00281	30484	Tl-208	0.516	0.0188	0.0297	1.00 - 3.75
5A-00281	30484	Tm-171	3.58 U	14.9	4.84	1.00 - 3.75
5A-00282	30485	Ac-227	-0.0381 U	0.246	0.0725	0.00 - 0.50
5A-00282	30485	Bi-212	1.16	0.167	0.103	0.00 - 0.50
5A-00282	30485	Bi-214	1.64	0.0381	0.0751	0.00 - 0.50
5A-00282	30485	Cd-113m	-40.6 U	159	47.9	0.00 - 0.50
5A-00282	30485	Co-60	0.0033 U	0.0215	0.0062	0.00 - 0.50
5A-00282	30485	Cs-134	0.0035 U	0.0186	0.0061	0.00 - 0.50
5A-00282	30485	Cs-137	0.327	0.0221	0.0204	0.00 - 0.50
5A-00282	30485	Eu-152	-0.0305 U	0.0607	0.0203	0.00 - 0.50
5A-00282	30485	Eu-154	-0.0805 U J	0.114	0.0405	0.00 - 0.50
5A-00282	30485	Eu-155	0.11 SK	0.0845	0.0323	0.00 - 0.50
5A-00282	30485	Ho-166m	0.0042 U	0.0335	0.0097	0.00 - 0.50
5A-00282	30485	K-40	21.7	0.181	1.22	0.00 - 0.50
5A-00282	30485	Na-22	-0.0212 U J	0.0227	0.0086	0.00 - 0.50
5A-00282	30485	Nb-94	0.015 JSK	0.0207	0.0068	0.00 - 0.50

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00282	30485	Np-236	-0.0094 U	0.0455	0.0139	0.00 - 0.50
5A-00282	30485	Np-239	0.0705 U	0.164	0.05	0.00 - 0.50
5A-00282	30485	Pa-231	0.0575 U	1.02	0.298	0.00 - 0.50
5A-00282	30485	Pb-212	2.15	0.0413	0.118	0.00 - 0.50
5A-00282	30485	Pb-214	1.8	0.0446	0.0816	0.00 - 0.50
5A-00282	30485	Sb-125	0.007 U	0.0581	0.0173	0.00 - 0.50
5A-00282	30485	Sn-126	0.0084 U	0.0223	0.0066	0.00 - 0.50
5A-00282	30485	Th-234	2.54	0.366	0.249	0.00 - 0.50
5A-00282	30485	Tl-208	0.628	0.022	0.0352	0.00 - 0.50
5A-00282	30485	Tm-171	-9.54 U	16.8	6.03	0.00 - 0.50
5A-00282	30486	Ac-227	-0.0742 U	0.23	0.0719	1.00 - 3.00
5A-00282	30486	Bi-212	0.794	0.15	0.0905	1.00 - 3.00
5A-00282	30486	Bi-214	1.18	0.0339	0.0587	1.00 - 3.00
5A-00282	30486	Cd-113m	-23.3 U	150	49	1.00 - 3.00
5A-00282	30486	Co-60	-0.0109 U	0.0199	0.0067	1.00 - 3.00
5A-00282	30486	Cs-134	-0.0017 U	0.0169	0.0058	1.00 - 3.00
5A-00282	30486	Cs-137	0.113	0.02	0.0111	1.00 - 3.00
5A-00282	30486	Eu-152	-0.0223 U	0.0558	0.0205	1.00 - 3.00
5A-00282	30486	Eu-154	-0.0471 U J	0.114	0.0359	1.00 - 3.00
5A-00282	30486	Eu-155	0.0474 JSK	0.0862	0.0287	1.00 - 3.00
5A-00282	30486	Ho-166m	-0.0092 U	0.0314	0.0098	1.00 - 3.00
5A-00282	30486	K-40	21	0.157	1.15	1.00 - 3.00
5A-00282	30486	Na-22	0.0051 U	0.0256	0.0076	1.00 - 3.00
5A-00282	30486	Nb-94	0.0017 U	0.0181	0.0054	1.00 - 3.00
5A-00282	30486	Np-236	0.0009 U	0.0455	0.0141	1.00 - 3.00
5A-00282	30486	Np-239	-0.0578 U	0.156	0.049	1.00 - 3.00
5A-00282	30486	Pa-231	0.249 U	0.992	0.311	1.00 - 3.00
5A-00282	30486	Pb-212	1.53	0.0387	0.0929	1.00 - 3.00
5A-00282	30486	Pb-214	1.33	0.0427	0.0631	1.00 - 3.00
5A-00282	30486	Sb-125	0.0066 U	0.0527	0.0153	1.00 - 3.00
5A-00282	30486	Sn-126	0.0039 U	0.0199	0.0059	1.00 - 3.00
5A-00282	30486	Th-234	1.72	0.372	0.202	1.00 - 3.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00282	30486	Tl-208	0.498	0.0183	0.0299	1.00 - 3.00
5A-00282	30486	Tm-171	-5.2 U	19.6	6.86	1.00 - 3.00
5A-00283	30487	Ac-227	0.0009 U	0.216	0.0638	0.00 - 0.50
5A-00283	30487	Bi-212	0.914	0.136	0.0837	0.00 - 0.50
5A-00283	30487	Bi-214	1.3	0.0318	0.0612	0.00 - 0.50
5A-00283	30487	Cd-113m	-25.4 U	142	42.6	0.00 - 0.50
5A-00283	30487	Co-60	-0.003 U	0.0187	0.0056	0.00 - 0.50
5A-00283	30487	Cs-134	0.0096 JSK	0.0161	0.0057	0.00 - 0.50
5A-00283	30487	Cs-137	0.161	0.0173	0.0122	0.00 - 0.50
5A-00283	30487	Eu-152	0.0247 U	0.053	0.0171	0.00 - 0.50
5A-00283	30487	Eu-154	-0.0499 U J	0.0976	0.0377	0.00 - 0.50
5A-00283	30487	Eu-155	0.0994 SK	0.0745	0.0314	0.00 - 0.50
5A-00283	30487	Ho-166m	0.0024 U	0.029	0.0085	0.00 - 0.50
5A-00283	30487	K-40	22.5	0.146	1.22	0.00 - 0.50
5A-00283	30487	Na-22	-0.0037 U	0.0209	0.0073	0.00 - 0.50
5A-00283	30487	Nb-94	-0.0025 U	0.0166	0.005	0.00 - 0.50
5A-00283	30487	Np-236	-0.0307 U J	0.0405	0.0146	0.00 - 0.50
5A-00283	30487	Np-239	0.0355 U	0.144	0.0428	0.00 - 0.50
5A-00283	30487	Pa-231	-0.204 U	0.883	0.269	0.00 - 0.50
5A-00283	30487	Pb-212	1.73	0.0368	0.103	0.00 - 0.50
5A-00283	30487	Pb-214	1.49	0.0364	0.0696	0.00 - 0.50
5A-00283	30487	Sb-125	0.0095 U	0.0491	0.0149	0.00 - 0.50
5A-00283	30487	Sn-126	0.0018 U	0.0185	0.0054	0.00 - 0.50
5A-00283	30487	Th-234	1.82	0.309	0.185	0.00 - 0.50
5A-00283	30487	Tl-208	0.53	0.0174	0.0306	0.00 - 0.50
5A-00283	30487	Tm-171	2.91 U	16.6	5.56	0.00 - 0.50
5A-00283	30488	Ac-227	-0.0441 U	0.196	0.0584	1.00 - 3.67
5A-00283	30488	Bi-212	0.999	0.129	0.0865	1.00 - 3.67
5A-00283	30488	Bi-214	1.17	0.0305	0.0544	1.00 - 3.67
5A-00283	30488	Cd-113m	-15 U	128	39	1.00 - 3.67
5A-00283	30488	Co-60	-0.0025 U	0.0172	0.0051	1.00 - 3.67
5A-00283	30488	Cs-134	0.0031 U	0.0151	0.005	1.00 - 3.67

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00283	30488	Cs-137	0.0965	0.0204	0.01	1.00 - 3.67
5A-00283	30488	Eu-152	-0.029 U	0.047	0.0163	1.00 - 3.67
5A-00283	30488	Eu-154	-0.0716 U J	0.0978	0.0352	1.00 - 3.67
5A-00283	30488	Eu-155	0.0724 JSK	0.0709	0.0269	1.00 - 3.67
5A-00283	30488	Ho-166m	-0.0034 U	0.0267	0.0079	1.00 - 3.67
5A-00283	30488	K-40	21.5	0.131	1.19	1.00 - 3.67
5A-00283	30488	Na-22	-0.0112 U	0.0191	0.0073	1.00 - 3.67
5A-00283	30488	Nb-94	0.0038 U	0.0156	0.0046	1.00 - 3.67
5A-00283	30488	Np-236	-0.0101 U	0.0369	0.0114	1.00 - 3.67
5A-00283	30488	Np-239	-0.0083 U	0.129	0.0376	1.00 - 3.67
5A-00283	30488	Pa-231	-0.131 U	0.816	0.242	1.00 - 3.67
5A-00283	30488	Pb-212	1.5	0.0336	0.0828	1.00 - 3.67
5A-00283	30488	Pb-214	1.3	0.0349	0.0602	1.00 - 3.67
5A-00283	30488	Sb-125	0.0283 JSK	0.046	0.0149	1.00 - 3.67
5A-00283	30488	Sn-126	0.0039 U	0.0178	0.0052	1.00 - 3.67
5A-00283	30488	Th-234	2.15	0.306	0.182	1.00 - 3.67
5A-00283	30488	Tl-208	0.466	0.0168	0.0258	1.00 - 3.67
5A-00283	30488	Tm-171	-5.03 U	13.5	4.63	1.00 - 3.67
5A-00284	30489	Ac-227	0.0432 U	0.22	0.0663	0.00 - 0.50
5A-00284	30489	Bi-212	1.05	0.149	0.0915	0.00 - 0.50
5A-00284	30489	Bi-214	1.27	0.0361	0.0599	0.00 - 0.50
5A-00284	30489	Cd-113m	-14 U	145	47.2	0.00 - 0.50
5A-00284	30489	Co-60	0.0055 U	0.0204	0.006	0.00 - 0.50
5A-00284	30489	Cs-134	0.0061 U	0.0175	0.006	0.00 - 0.50
5A-00284	30489	Cs-137	0.12	0.0195	0.0102	0.00 - 0.50
5A-00284	30489	Eu-152	-0.0443 U J	0.0529	0.0197	0.00 - 0.50
5A-00284	30489	Eu-154	-0.0578 U J	0.108	0.0354	0.00 - 0.50
5A-00284	30489	Eu-155	0.11 SK	0.0723	0.0293	0.00 - 0.50
5A-00284	30489	Ho-166m	-0.0067 U	0.0309	0.0095	0.00 - 0.50
5A-00284	30489	K-40	21.7	0.151	1.19	0.00 - 0.50
5A-00284	30489	Na-22	-0.0075 U	0.0223	0.007	0.00 - 0.50
5A-00284	30489	Nb-94	0.0114 JSK	0.0183	0.0059	0.00 - 0.50

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00284	30489	Np-236	-0.0255 U	0.0396	0.0139	0.00 - 0.50
5A-00284	30489	Np-239	0.0055 U	0.145	0.0432	0.00 - 0.50
5A-00284	30489	Pa-231	-0.669 U J	0.873	0.323	0.00 - 0.50
5A-00284	30489	Pb-212	1.64	0.0363	0.1	0.00 - 0.50
5A-00284	30489	Pb-214	1.39	0.0402	0.0671	0.00 - 0.50
5A-00284	30489	Sb-125	0 U	0.0518	0.015	0.00 - 0.50
5A-00284	30489	Sn-126	0.0001 U	0.02	0.006	0.00 - 0.50
5A-00284	30489	Th-234	1.95	0.318	0.172	0.00 - 0.50
5A-00284	30489	Tl-208	0.481	0.0182	0.0289	0.00 - 0.50
5A-00284	30489	Tm-171	-4.27 U	12.6	4.47	0.00 - 0.50
5A-00284	30490	Ac-227	0.136 J	0.222	0.0731	1.00 - 5.00
5A-00284	30490	Bi-212	0.842 J	0.211	0.215	1.00 - 5.00
5A-00284	30490	Bi-214	1.01	0.0315	0.0494	1.00 - 5.00
5A-00284	30490	Cd-113m	-48.5 U	143	49.2	1.00 - 5.00
5A-00284	30490	Co-60	0.0058 U	0.018	0.0053	1.00 - 5.00
5A-00284	30490	Cs-134	0.0094 JSK	0.0166	0.0059	1.00 - 5.00
5A-00284	30490	Cs-137	0.0054 U	0.0195	0.0058	1.00 - 5.00
5A-00284	30490	Eu-152	-0.0375 U	0.0528	0.0305	1.00 - 5.00
5A-00284	30490	Eu-154	-0.0136 U J	0.103	0.0312	1.00 - 5.00
5A-00284	30490	Eu-155	0.0304 U	0.0847	0.0258	1.00 - 5.00
5A-00284	30490	Ho-166m	-0.0006 U	0.0286	0.0085	1.00 - 5.00
5A-00284	30490	K-40	19.3	0.134	1.06	1.00 - 5.00
5A-00284	30490	Na-22	-0.0216 U J	0.0202	0.0081	1.00 - 5.00
5A-00284	30490	Nb-94	0.0042 U	0.0166	0.0049	1.00 - 5.00
5A-00284	30490	Np-236	-0.0062 U	0.0453	0.0135	1.00 - 5.00
5A-00284	30490	Np-239	0.0124 U	0.15	0.0449	1.00 - 5.00
5A-00284	30490	Pa-231	-0.83 U J	0.897	0.379	1.00 - 5.00
5A-00284	30490	Pb-212	1.4	0.0369	0.081	1.00 - 5.00
5A-00284	30490	Pb-214	1.1	0.0371	0.0535	1.00 - 5.00
5A-00284	30490	Sb-125	0.0123 U	0.0489	0.015	1.00 - 5.00
5A-00284	30490	Sn-126	-0.0008 U	0.0185	0.0055	1.00 - 5.00
5A-00284	30490	Th-234	1.81	0.365	0.188	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00284	30490	Tl-208	0.43	0.0176	0.0261	1.00 - 5.00
5A-00284	30490	Tm-171	-15.3 U	18.8	8.18	1.00 - 5.00
5A-00285	30491	Ac-227	-0.146 U	0.225	0.076	0.25 - 0.75
5A-00285	30491	Bi-212	0.894 J	0.274	0.231	0.25 - 0.75
5A-00285	30491	Bi-214	0.867	0.0423	0.0476	0.25 - 0.75
5A-00285	30491	Cd-113m	-37.9 U	157	47.4	0.25 - 0.75
5A-00285	30491	Co-60	0.0008 U	0.0248	0.0071	0.25 - 0.75
5A-00285	30491	Cs-134	-0.0031 U	0.0197	0.0067	0.25 - 0.75
5A-00285	30491	Cs-137	0.0405	0.0258	0.0104	0.25 - 0.75
5A-00285	30491	Eu-152	-0.0337 U	0.0588	0.0221	0.25 - 0.75
5A-00285	30491	Eu-154	-0.0031 U J	0.141	0.0421	0.25 - 0.75
5A-00285	30491	Eu-155	0.107 JSK	0.0796	0.0343	0.25 - 0.75
5A-00285	30491	Ho-166m	-0.0126 U	0.0367	0.0114	0.25 - 0.75
5A-00285	30491	K-40	19.2	0.185	1.06	0.25 - 0.75
5A-00285	30491	Na-22	0.0053 U	0.0302	0.0087	0.25 - 0.75
5A-00285	30491	Nb-94	0.0092 U	0.0222	0.0067	0.25 - 0.75
5A-00285	30491	Np-236	0.0045 U	0.0415	0.0126	0.25 - 0.75
5A-00285	30491	Np-239	-0.0759 U	0.149	0.0478	0.25 - 0.75
5A-00285	30491	Pa-231	-0.122 U	0.931	0.286	0.25 - 0.75
5A-00285	30491	Pb-212	1.26	0.0378	0.0722	0.25 - 0.75
5A-00285	30491	Pb-214	1.01	0.0423	0.0499	0.25 - 0.75
5A-00285	30491	Sb-125	0.0268 U	0.0573	0.0178	0.25 - 0.75
5A-00285	30491	Sn-126	0.0176 J	0.0258	0.0083	0.25 - 0.75
5A-00285	30491	Th-234	1.47 J	0.399	0.39	0.25 - 0.75
5A-00285	30491	Tl-208	0.407	0.0233	0.026	0.25 - 0.75
5A-00285	30491	Tm-171	-5.56 U	13.8	4.35	0.25 - 0.75
5A-00285	30492	Ac-227	-0.101 U	0.191	0.0622	1.00 - 5.00
5A-00285	30492	Bi-212	0.938	0.125	0.0773	1.00 - 5.00
5A-00285	30492	Bi-214	1.11	0.0287	0.0523	1.00 - 5.00
5A-00285	30492	Cd-113m	-30 U	129	39.2	1.00 - 5.00
5A-00285	30492	Co-60	0.0032 U	0.0175	0.0051	1.00 - 5.00
5A-00285	30492	Cs-134	0.0056 U	0.0144	0.0049	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00285	30492	Cs-137	0.0012 U	0.0162	0.0054	1.00 - 5.00
5A-00285	30492	Eu-152	0.0054 U	0.0474	0.0161	1.00 - 5.00
5A-00285	30492	Eu-154	-0.0703 U J	0.094	0.0343	1.00 - 5.00
5A-00285	30492	Eu-155	0.0296 U	0.0707	0.0225	1.00 - 5.00
5A-00285	30492	Ho-166m	-0.0041 U	0.025	0.0075	1.00 - 5.00
5A-00285	30492	K-40	20.2	0.121	1.1	1.00 - 5.00
5A-00285	30492	Na-22	-0.0102 U	0.0191	0.0063	1.00 - 5.00
5A-00285	30492	Nb-94	0.0074 U	0.0151	0.0047	1.00 - 5.00
5A-00285	30492	Np-236	-0.0216 U	0.0371	0.0126	1.00 - 5.00
5A-00285	30492	Np-239	-0.0176 U	0.13	0.0385	1.00 - 5.00
5A-00285	30492	Pa-231	-0.261 U	0.781	0.243	1.00 - 5.00
5A-00285	30492	Pb-212	1.49	0.0324	0.0884	1.00 - 5.00
5A-00285	30492	Pb-214	1.29	0.0334	0.0601	1.00 - 5.00
5A-00285	30492	Sb-125	-0.0122 U	0.0427	0.0134	1.00 - 5.00
5A-00285	30492	Sn-126	-0.002 U	0.0163	0.0048	1.00 - 5.00
5A-00285	30492	Th-234	1.38	0.303	0.158	1.00 - 5.00
5A-00285	30492	Tl-208	0.411	0.016	0.0239	1.00 - 5.00
5A-00285	30492	Tm-171	3.58 U	15.3	5.14	1.00 - 5.00
5A-00286	30493	Ac-227	-0.0709 U	0.192	0.0598	0.17 - 0.67
5A-00286	30493	Bi-212	0.856	0.127	0.0713	0.17 - 0.67
5A-00286	30493	Bi-214	0.952	0.0297	0.0455	0.17 - 0.67
5A-00286	30493	Cd-113m	-19.1 U	133	41.1	0.17 - 0.67
5A-00286	30493	Co-60	0.0053 U	0.018	0.0052	0.17 - 0.67
5A-00286	30493	Cs-134	-0.0042 U	0.0142	0.005	0.17 - 0.67
5A-00286	30493	Cs-137	0.0445	0.0155	0.0076	0.17 - 0.67
5A-00286	30493	Eu-152	-0.0107 U	0.0473	0.0157	0.17 - 0.67
5A-00286	30493	Eu-154	0.0294 U J	0.102	0.0308	0.17 - 0.67
5A-00286	30493	Eu-155	0.0581 JSK	0.0713	0.0255	0.17 - 0.67
5A-00286	30493	Ho-166m	-0.0071 U	0.0249	0.0076	0.17 - 0.67
5A-00286	30493	K-40	20.6	0.127	1.2	0.17 - 0.67
5A-00286	30493	Na-22	-0.0018 U	0.0209	0.0061	0.17 - 0.67
5A-00286	30493	Nb-94	0.0093 JSK	0.0151	0.0048	0.17 - 0.67

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00286	30493	Np-236	-0.0061 U	0.0376	0.0117	0.17 - 0.67
5A-00286	30493	Np-239	0.0157 U	0.133	0.0393	0.17 - 0.67
5A-00286	30493	Pa-231	-0.18 U	0.798	0.251	0.17 - 0.67
5A-00286	30493	Pb-212	1.38	0.0328	0.0922	0.17 - 0.67
5A-00286	30493	Pb-214	1.12	0.0336	0.0551	0.17 - 0.67
5A-00286	30493	Sb-125	0.0025 U	0.0438	0.0132	0.17 - 0.67
5A-00286	30493	Sn-126	-0.0056 U	0.016	0.005	0.17 - 0.67
5A-00286	30493	Th-234	1.53	0.305	0.187	0.17 - 0.67
5A-00286	30493	Tl-208	0.39	0.0162	0.0235	0.17 - 0.67
5A-00286	30493	Tm-171	-2.8 U	15.7	5.34	0.17 - 0.67
5A-00286	30494	Ac-227	-0.0927 U	0.186	0.0618	1.00 - 5.00
5A-00286	30494	Bi-212	0.808	0.123	0.0674	1.00 - 5.00
5A-00286	30494	Bi-214	1.05	0.0287	0.0493	1.00 - 5.00
5A-00286	30494	Cd-113m	11.7 U	127	40.2	1.00 - 5.00
5A-00286	30494	Co-60	-0.0013 U	0.0166	0.0048	1.00 - 5.00
5A-00286	30494	Cs-134	0.0046 U	0.014	0.0049	1.00 - 5.00
5A-00286	30494	Cs-137	0.0111	0.0176	0.0038	1.00 - 5.00
5A-00286	30494	Eu-152	-0.0133 U	0.0453	0.018	1.00 - 5.00
5A-00286	30494	Eu-154	-0.0208 U J	0.095	0.0289	1.00 - 5.00
5A-00286	30494	Eu-155	-0.0014 U	0.0647	0.0192	1.00 - 5.00
5A-00286	30494	Ho-166m	-0.0032 U	0.0259	0.008	1.00 - 5.00
5A-00286	30494	K-40	22.2	0.122	1.2	1.00 - 5.00
5A-00286	30494	Na-22	-0.0089 U	0.0189	0.0072	1.00 - 5.00
5A-00286	30494	Nb-94	-0.0012 U	0.0149	0.0045	1.00 - 5.00
5A-00286	30494	Np-236	-0.0088 U	0.035	0.0107	1.00 - 5.00
5A-00286	30494	Np-239	-0.0124 U	0.127	0.039	1.00 - 5.00
5A-00286	30494	Pa-231	-0.0255 U	0.789	0.243	1.00 - 5.00
5A-00286	30494	Pb-212	1.37	0.0316	0.078	1.00 - 5.00
5A-00286	30494	Pb-214	1.18	0.033	0.0554	1.00 - 5.00
5A-00286	30494	Sb-125	-0.0246 U	0.042	0.014	1.00 - 5.00
5A-00286	30494	Sn-126	0.0032 U	0.0168	0.0051	1.00 - 5.00
5A-00286	30494	Th-234	1.56	0.285	0.139	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00286	30494	Tl-208	0.432	0.0158	0.0247	1.00 - 5.00
5A-00286	30494	Tm-171	-1.17 U	11	3.66	1.00 - 5.00
5A-00287	30495	Ac-227	-0.0333 U	0.201	0.0602	0.00 - 0.50
5A-00287	30495	Bi-212	0.851	0.126	0.0732	0.00 - 0.50
5A-00287	30495	Bi-214	0.925	0.0314	0.0446	0.00 - 0.50
5A-00287	30495	Cd-113m	-47.5 U	131	40.9	0.00 - 0.50
5A-00287	30495	Co-60	-0.0075 U	0.0177	0.0056	0.00 - 0.50
5A-00287	30495	Cs-134	0.015 JSK	0.015	0.0059	0.00 - 0.50
5A-00287	30495	Cs-137	0.0266	0.0161	0.0062	0.00 - 0.50
5A-00287	30495	Eu-152	-0.027 U	0.0469	0.0177	0.00 - 0.50
5A-00287	30495	Eu-154	-0.0312 U	0.0972	0.0308	0.00 - 0.50
5A-00287	30495	Eu-155	0.0973 SK	0.0697	0.0287	0.00 - 0.50
5A-00287	30495	Ho-166m	-0.0101 U	0.0261	0.0082	0.00 - 0.50
5A-00287	30495	K-40	21.6	0.133	1.26	0.00 - 0.50
5A-00287	30495	Na-22	0.0039 U	0.0213	0.0062	0.00 - 0.50
5A-00287	30495	Nb-94	0.002 U	0.0151	0.0044	0.00 - 0.50
5A-00287	30495	Np-236	-0.0048 U	0.0384	0.0125	0.00 - 0.50
5A-00287	30495	Np-239	0.03 U	0.136	0.0404	0.00 - 0.50
5A-00287	30495	Pa-231	0.0397 U	0.812	0.259	0.00 - 0.50
5A-00287	30495	Pb-212	1.47	0.0344	0.0981	0.00 - 0.50
5A-00287	30495	Pb-214	1.03	0.0357	0.0522	0.00 - 0.50
5A-00287	30495	Ra-226	0.886	0.0895	0.0504	0.00 - 0.50
5A-00287	30495	Sb-125	0.0049 U	0.0445	0.0134	0.00 - 0.50
5A-00287	30495	Sn-126	-0.0103 U	0.0163	0.0055	0.00 - 0.50
5A-00287	30495	Th-234	1.46	0.308	0.176	0.00 - 0.50
5A-00287	30495	Tl-208	0.423	0.0163	0.025	0.00 - 0.50
5A-00287	30495	Tm-171	-2.06 U	15.8	5.35	0.00 - 0.50
5A-00287	30496	Ac-227	-0.223 U J	0.275	0.0996	1.00 - 5.00
5A-00287	30496	Bi-212	1.14	0.179	0.111	1.00 - 5.00
5A-00287	30496	Bi-214	2.28	0.0407	0.104	1.00 - 5.00
5A-00287	30496	Cd-113m	-79.6 U	184	59.1	1.00 - 5.00
5A-00287	30496	Co-60	0.0016 U	0.0232	0.0068	1.00 - 5.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00287	30496	Cs-134	-0.0055 U	0.0199	0.0071	1.00 - 5.00
5A-00287	30496	Cs-137	-0.0112 U	0.023	0.0086	1.00 - 5.00
5A-00287	30496	Eu-152	-0.0486 U	0.0677	0.0257	1.00 - 5.00
5A-00287	30496	Eu-154	-0.047 U	0.128	0.0397	1.00 - 5.00
5A-00287	30496	Eu-155	0.0882 SK	0.0982	0.0354	1.00 - 5.00
5A-00287	30496	Ho-166m	-0.0147 U	0.035	0.0112	1.00 - 5.00
5A-00287	30496	K-40	21.5	0.198	1.18	1.00 - 5.00
5A-00287	30496	Na-22	-0.0081 U	0.0269	0.0083	1.00 - 5.00
5A-00287	30496	Nb-94	0.002 U	0.0215	0.0064	1.00 - 5.00
5A-00287	30496	Np-236	-0.004 U	0.0541	0.0169	1.00 - 5.00
5A-00287	30496	Np-239	-0.0449 U	0.185	0.0564	1.00 - 5.00
5A-00287	30496	Pa-231	0.473 U	1.18	0.393	1.00 - 5.00
5A-00287	30496	Pb-212	1.7	0.0472	0.104	1.00 - 5.00
5A-00287	30496	Pb-214	2.51	0.0493	0.115	1.00 - 5.00
5A-00287	30496	Ra-226	2.08	0.103	0.0956	1.00 - 5.00
5A-00287	30496	Sb-125	0.0435 JSK	0.0659	0.0213	1.00 - 5.00
5A-00287	30496	Sn-126	-0.0061 U	0.0234	0.0072	1.00 - 5.00
5A-00287	30496	Th-234	2.18	0.445	0.233	1.00 - 5.00
5A-00287	30496	Tl-208	0.555	0.0221	0.0342	1.00 - 5.00
5A-00287	30496	Tm-171	-5.12 U	23.3	8.12	1.00 - 5.00
5A-00288	30497	Ac-227	0.0165 U	0.172	0.0502	0.00 - 0.50
5A-00288	30497	Bi-212	0.855	0.114	0.0674	0.00 - 0.50
5A-00288	30497	Bi-214	0.892	0.0263	0.0426	0.00 - 0.50
5A-00288	30497	Cd-113m	-3.28 U	112	32.9	0.00 - 0.50
5A-00288	30497	Co-60	0 U	0.0149	0.0044	0.00 - 0.50
5A-00288	30497	Cs-134	0.0074 JSK	0.0135	0.0049	0.00 - 0.50
5A-00288	30497	Cs-137	0.0234	0.0164	0.0061	0.00 - 0.50
5A-00288	30497	Eu-152	-0.0123 U	0.0413	0.0144	0.00 - 0.50
5A-00288	30497	Eu-154	-0.0485 U	0.0823	0.0278	0.00 - 0.50
5A-00288	30497	Eu-155	0.0802 SK	0.0601	0.0225	0.00 - 0.50
5A-00288	30497	Ho-166m	0.0033 U	0.0241	0.007	0.00 - 0.50
5A-00288	30497	K-40	20.7	0.104	1.12	0.00 - 0.50

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00288	30497	Na-22	-0.0056 U	0.0166	0.0053	0.00 - 0.50
5A-00288	30497	Nb-94	0.002 U	0.0137	0.0039	0.00 - 0.50
5A-00288	30497	Np-236	-0.0135 U	0.0328	0.0106	0.00 - 0.50
5A-00288	30497	Np-239	0.0186 U	0.116	0.0338	0.00 - 0.50
5A-00288	30497	Pa-231	0.0735 U	0.714	0.216	0.00 - 0.50
5A-00288	30497	Pb-212	1.41	0.0285	0.0797	0.00 - 0.50
5A-00288	30497	Pb-214	0.972	0.029	0.0455	0.00 - 0.50
5A-00288	30497	Ra-226	0.952	0.135	0.0603	0.00 - 0.50
5A-00288	30497	Sb-125	0.0014 U	0.0388	0.0116	0.00 - 0.50
5A-00288	30497	Sn-126	0.0053 U	0.0153	0.0045	0.00 - 0.50
5A-00288	30497	Th-234	1.47	0.261	0.146	0.00 - 0.50
5A-00288	30497	Tl-208	0.425	0.0139	0.0239	0.00 - 0.50
5A-00288	30497	Tm-171	-6.32 U	11.2	4.1	0.00 - 0.50
5A-00288	30498	Ac-227	-0.0824 U	0.177	0.0561	1.00 - 3.00
5A-00288	30498	Bi-212	0.725	0.123	0.0715	1.00 - 3.00
5A-00288	30498	Bi-214	0.794	0.029	0.0395	1.00 - 3.00
5A-00288	30498	Cd-113m	-55.8 U	119	39.7	1.00 - 3.00
5A-00288	30498	Co-60	0.0016 U	0.0163	0.0048	1.00 - 3.00
5A-00288	30498	Cs-134	-0.0022 U	0.0141	0.005	1.00 - 3.00
5A-00288	30498	Cs-137	-0.0079 U	0.016	0.0053	1.00 - 3.00
5A-00288	30498	Eu-152	0.0119 U	0.0437	0.022	1.00 - 3.00
5A-00288	30498	Eu-154	0.0058 U	0.0924	0.0271	1.00 - 3.00
5A-00288	30498	Eu-155	0.0319 U	0.0655	0.021	1.00 - 3.00
5A-00288	30498	Ho-166m	-0.0012 U	0.0258	0.0075	1.00 - 3.00
5A-00288	30498	K-40	19.7	0.105	1.07	1.00 - 3.00
5A-00288	30498	Na-22	0.0035 U	0.0201	0.006	1.00 - 3.00
5A-00288	30498	Nb-94	0.0075 JSK	0.0148	0.0045	1.00 - 3.00
5A-00288	30498	Np-236	-0.0067 U	0.0352	0.0108	1.00 - 3.00
5A-00288	30498	Np-239	-0.0446 U	0.121	0.0374	1.00 - 3.00
5A-00288	30498	Pa-231	-0.0403 U	0.763	0.247	1.00 - 3.00
5A-00288	30498	Pb-212	1.18	0.0307	0.067	1.00 - 3.00
5A-00288	30498	Pb-214	0.844	0.0314	0.0412	1.00 - 3.00

Table A.2
Analytical Results Summary
Subarea 5A, Round 2

Sample Location	Sample Identification	Analyte Name	Activity	MDC	TPU	Sample Depth (feet bgs)
5A-00288	30498	Ra-226	0.752	0.0924	0.0489	1.00 - 3.00
5A-00288	30498	Sb-125	-0.0191 U	0.0408	0.0132	1.00 - 3.00
5A-00288	30498	Sn-126	-0.0013 U	0.016	0.0047	1.00 - 3.00
5A-00288	30498	Th-234	1.19	0.274	0.139	1.00 - 3.00
5A-00288	30498	Tl-208	0.367	0.0152	0.0219	1.00 - 3.00
5A-00288	30498	Tm-171	-8.01 U	11.8	4.52	1.00 - 3.00

Notes:

Refer to Table 2.1 of the Final Field Sampling Plan for Soil Sampling (HGL, 2012a) for a definition of radionuclide symbols.

Reporting units in picocuries per gram.

bgs - below ground surface

MDC - minimum detectable concentration

RTL - radiological trigger level

TPU - total propagated uncertainty

J - The analyte was detected at the reported concentration; the quantitation is an estimate.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

S - Analyte result is subject to spectral interference. Unless otherwise qualified, the data is believed to be consistent with the background study results and may be used for its intended purpose.

U - Not considered detected. The associated number is the reported concentration.

Z - The initial laboratory result was reported above its respective RTL (or Lookup Table value). The gamma spectrometry data has been inspected to determine whether the exceeding analyte is present at a quantity greater than the RTL. In the analyst's judgment, the result is unsupported by the analytical data and is therefore not considered an RTL exceedance.

Table A.3
Parent and Field Duplicate Results Summary
Subarea 5A, Round 2

Sample Location	Parent Sample					Field Duplicate Sample				
	Sample ID	Analyte Name	Activity	MDC	TPU	Sample ID	Analyte Name	Activity	MDC	TPU
5A-00265	30452	Ni-59	0.872 J	0.561	0.455	30499	Ni-59	0.313 J	0.552	0.393
5A-00266	30454	Ac-227	-0.127 U	0.225	0.0748	30500	Ac-227	-0.0221 U	0.19	0.0588
5A-00266	30454	Bi-212	0.829	0.155	0.0834	30500	Bi-212	0.886	0.157	0.0879
5A-00266	30454	Bi-214	1.09	0.0351	0.0549	30500	Bi-214	1.07	0.0352	0.0529
5A-00266	30454	Cd-113m	-4.78 U	154	49.7	30500	Cd-113m	88 J	130	44
5A-00266	30454	Co-60	0.0021 U	0.0214	0.0062	30500	Co-60	0.0047 U	0.0223	0.0063
5A-00266	30454	Cs-134	-0.0046 U	0.017	0.0060	30500	Cs-134	0.0022 U	0.0175	0.0060
5A-00266	30454	Cs-137	0.0092 U	0.0205	0.0071	30500	Cs-137	-0.0005 U	0.0208	0.0072
5A-00266	30454	Eu-152	-0.0512 U J	0.0543	0.0222	30500	Eu-152	0.0054 U	0.0498	0.0144
5A-00266	30454	Eu-154	0.0081 U J	0.118	0.0341	30500	Eu-154	-0.0462 U J	0.119	0.0377
5A-00266	30454	Eu-155	0.0752 SK	0.0768	0.0284	30500	Eu-155	0.0786 SK	0.0567	0.0232
5A-00266	30454	Ho-166m	0.0050 U	0.0322	0.0095	30500	Ho-166m	0.0069 U	0.0332	0.0095
5A-00266	30454	K-40	21.4	0.157	1.17	30500	K-40	20.6	0.162	1.13
5A-00266	30454	Na-22	-0.0176 U J	0.0232	0.0083	30500	Na-22	-0.0066 U	0.0252	0.0079
5A-00266	30454	Nb-94	0.0073 U	0.0187	0.0057	30500	Nb-94	0.0096 JSK	0.019	0.006
5A-00266	30454	Np-236	0.0184 U	0.0435	0.014	30500	Np-236	-0.0176 U	0.0318	0.0104
5A-00266	30454	Np-239	0.0281 U	0.154	0.0459	30500	Np-239	-0.013 U	0.124	0.038
5A-00266	30454	Pa-231	-0.0585 U	0.927	0.301	30500	Pa-231	-0.291 U	0.791	0.257
5A-00266	30454	Pb-212	1.41	0.0387	0.0852	30500	Pb-212	1.36	0.0313	0.0759
5A-00266	30454	Pb-214	1.2	0.0405	0.0571	30500	Pb-214	1.11	0.0353	0.052
5A-00266	30454	Sb-125	0.0242 U	0.0539	0.0171	30500	Sb-125	-0.0055 U	0.0487	0.0144

Table A.3
Parent and Field Duplicate Results Summary
Subarea 5A, Round 2

Sample Location	Parent Sample					Field Duplicate Sample				
	Sample ID	Analyte Name	Activity	MDC	TPU	Sample ID	Analyte Name	Activity	MDC	TPU
5A-00266	30454	Sn-126	0.0008 U	0.0201	0.0060	30500	Sn-126	0.0048 U	0.0211	0.0064
5A-00266	30454	Tl-208	0.426	0.0196	0.0263	30500	Tl-208	0.419	0.0194	0.0259
5A-00266	30454	Tm-171	-9.11 U	16.8	6.22	30500	Tm-171	-1.19 U	7.14	2.5
5A-00277	30475	Sr-90	0.156	0.253	0.0804	30501	Sr-90	0.115 U	0.454	0.134
5A-00287	30496	Ac-227	-0.223 U J	0.275	0.0996	30502	Ac-227	0.187 J	0.236	0.0815
5A-00287	30496	Bi-212	1.14	0.179	0.111	30502	Bi-212	1.09	0.144	0.095
5A-00287	30496	Bi-214	2.28	0.0407	0.104	30502	Bi-214	2.29	0.0347	0.0996
5A-00287	30496	Cd-113m	-79.6 U	184	59.1	30502	Cd-113m	-12 U	156	46.3
5A-00287	30496	Co-60	0.0016 U	0.0232	0.0068	30502	Co-60	-0.0059 U	0.0194	0.0060
5A-00287	30496	Cs-134	-0.0055 U	0.0199	0.0071	30502	Cs-134	0.0067 U	0.0169	0.0058
5A-00287	30496	Cs-137	-0.0112 U	0.023	0.0086	30502	Cs-137	0.0117 J	0.0196	0.0069
5A-00287	30496	Eu-152	-0.0486 U	0.0677	0.0257	30502	Eu-152	-0.0093 U	0.0567	0.0197
5A-00287	30496	Eu-154	-0.047 U	0.128	0.0397	30502	Eu-154	0.0771 J	0.106	0.0396
5A-00287	30496	Eu-155	0.0882 SK	0.0982	0.0354	30502	Eu-155	0.0731 SK	0.0826	0.0272
5A-00287	30496	Ho-166m	-0.0147 U	0.035	0.0112	30502	Ho-166m	-0.0004 U	0.0302	0.0089
5A-00287	30496	K-40	21.5	0.198	1.18	30502	K-40	21.5	0.149	1.17
5A-00287	30496	Na-22	-0.0081 U	0.0269	0.0083	30502	Na-22	0.0091 U	0.0228	0.0078
5A-00287	30496	Nb-94	0.002 U	0.0215	0.0064	30502	Nb-94	0.0055 U	0.0177	0.0053
5A-00287	30496	Np-236	-0.0040 U	0.0541	0.0169	30502	Np-236	-0.0262 U	0.0445	0.0151
5A-00287	30496	Np-239	-0.0449 U	0.185	0.0564	30502	Np-239	-0.0464 U	0.154	0.0471
5A-00287	30496	Pa-231	0.473 U	1.18	0.393	30502	Pa-231	-0.14 U	0.982	0.295

Table A.3
Parent and Field Duplicate Results Summary
Subarea 5A, Round 2

Sample Location	Parent Sample					Field Duplicate Sample				
	Sample ID	Analyte Name	Activity	MDC	TPU	Sample ID	Analyte Name	Activity	MDC	TPU
5A-00287	30496	Pb-212	1.7	0.0472	0.104	30502	Pb-212	1.77	0.0395	0.105
5A-00287	30496	Pb-214	2.51	0.0493	0.115	30502	Pb-214	2.54	0.0415	0.114
5A-00287	30496	Ra-226	2.08	0.103	0.0956	30502	Ra-226	2.14	0.128	0.104
5A-00287	30496	Sb-125	0.0435 JSK	0.0659	0.0213	30502	Sb-125	-0.0043 U	0.0527	0.0161
5A-00287	30496	Sn-126	-0.0061 U	0.0234	0.0072	30502	Sn-126	-0.0044 U	0.0188	0.0057
5A-00287	30496	Tl-208	0.555	0.0221	0.0342	30502	Tl-208	0.53	0.0188	0.0296
5A-00287	30496	Tm-171	-5.12 U	23.3	8.12	30502	Tm-171	-4.7 U	17.8	6.1

Notes:

Refer to Table 2.1 of the Final Field Sampling Plan for Soil Sampling (HGL, 2012a) for a definition of radionuclide symbols.

Reporting units in picocuries per gram.

ID - identification

MDC - minimum detectable concentration

TPU - total propagated uncertainty

J - The analyte was detected at the reported concentration; the quantitation is an estimate.

K - Analyte present. Reported value may be biased high. Actual value is expected to be lower.

S - Analyte result is subject to spectral interference. Unless otherwise qualified, the data is believed to be consistent with the background study results and may be used for its intended purpose.

U - Not considered detected. The associated number is the reported concentration.

Table A.4
Rinsate and Source Comparison Summary
Subarea 5A, Round 2

Sample Type	Sample ID	H-3[1]			U-233/U-234			U-235/U-236			U-238		
		Activity	MDC	TPU	Activity	MDC	TPU	Activity	MDC	TPU	Activity	MDC	TPU
Rinsate	R0742	--	--	--	-0.0289 U	0.0973	0.0213	0.0215 U	0.0664	0.0216	-0.00109 U	0.0616	0.0153
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0743	--	--	--	-0.0349 U	0.115	0.0268	-0.00127 U	0.072	0.0179	-0.0299 U	0.099	0.022
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0744	70.3 U	326	95.6	0.0143 U	0.0864	0.0257	-0.0117 U	0.091	0.0203	0.00683 U	0.0736	0.02
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0745	128 U	335	101	-0.0313 U	0.0962	0.0205	-0.0125 U	0.0687	0.0139	0.0231	0.0449	0.0174
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0746	--	--	--	-0.0131 U	0.114	0.0272	-0.00517 U	0.0926	0.0222	0.0148 U	0.0749	0.0224
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0747	--	--	--	0.00526 U	0.111	0.0298	0.00319 U	0.0726	0.0199	0.00922	0.025	0.0147
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0748	--	--	--	-0.0157 U	0.111	0.0257	0.00342 U	0.0778	0.0213	0	0.0268	0.0122
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0749	--	--	--	-0.032 U	0.148	0.0342	0.00353 U	0.0803	0.022	0.0232	0.0649	0.0229
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0816	--	--	--	-0.0248 U	0.0815	0.0181	0.00851 U	0.0424	0.0134	0.0446	0.0343	0.0181
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0817	--	--	--	-0.0289 U	0.116	0.0255	-0.0081 U	0.0716	0.0161	-0.0106 U	0.0823	0.0184
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0818	--	--	--	-0.00771 U	0.0802	0.0203	-0.00554 U	0.0632	0.0149	0.0167	0.0325	0.0126
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0819	--	--	--	-0.0215 U	0.0937	0.0208	0.00265 U	0.0603	0.0165	-0.00122 U	0.0693	0.0172
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201

U.S. EPA Region 9

Table A.4
Rinsate and Source Comparison Summary
Subarea 5A, Round 2

Sample Type	Sample ID	H-3[1]			U-233/U-234			U-235/U-236			U-238		
		Activity	MDC	TPU	Activity	MDC	TPU	Activity	MDC	TPU	Activity	MDC	TPU
Rinsate	R0820	--	--	--	-0.0135 U	0.0982	0.024	0.0326	0.0221	0.0193	0.0235	0.052	0.0182
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0821	--	--	--	-0.0238 U	0.091	0.0202	-0.0118 U	0.0646	0.0131	0.000795 U	0.0665	0.017
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0822	--	--	--	-0.00534 U	0.13	0.0332	0.0262	0.0733	0.0259	0.0171 U	0.0842	0.0248
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0823	--	--	--	-0.0372 U	0.112	0.0234	-0.00476 U	0.0854	0.0204	-0.00385 U	0.0691	0.0165
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0824	--	--	--	-0.0429 U	0.119	0.0261	-0.0089 U	0.0788	0.0177	0.0028 U	0.0637	0.0174
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0825	--	--	--	0.000144 U	0.117	0.0305	0.0429	0.0291	0.0254	-0.0101 U	0.0786	0.0175
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0826	--	--	--	0.0252 U	0.0916	0.029	0	0.0291	0.0133	0.0111 U	0.0554	0.0175
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201
Rinsate	R0827	--	--	--	0.00576 U	0.113	0.0305	-0.00839 U	0.0743	0.0167	0.0147 U	0.0744	0.0223
Source	S0281	231	403	126	-0.0573 U	0.181	0.0354	0.00875 U	0.123	0.0273	0.0162 U	0.0805	0.0201

Notes:

Refer to Table 2.1 of the Final Field Sampling Plan for Soil Sampling (HGL, 2012a) for a definition of radionuclide symbols.

[1]H-3 analyses was only required if it was included in the analytical suite for samples collected that day.

Reporting units in picocuries per liter.

-- - analyte not required/analyzed

MDC - minimum detectable concentration

TPU - total propagated uncertainty

U - Not considered detected. The associated number is the reported concentration.

ATTACHMENT 2

Boring Logs

The boring logs are provided in a separate pdf due to size restrictions.

This page was intentionally left blank.