590108-0610300003

CH2M HILL Mound, Inc.
1075 Mound Road
P.O. Box 750
Miamisburg, OH 45343-0750

CH2MHILL

SMO-463/06
July 31, 2006

Mr. Don Pfister, Director
Miamisburg Closure Project
U. S. Department of Energy
175 Tri-County Parkway
Springdale, OH 45246

ATTENTION: Paul Lucas

SUBJECT: **Contract No. DE-AC24-03OH20152:** Deliverable #36 Building Data Package; Section C.2.1.1 Facility Demolition; UGL Partial VII OSC Report, Final

Dear Mr. Pfister:

Attached is the following Final document for your records.

- UGL Partial VII OSC Report, Final

If you or members of your staff have any questions regarding the document, or if additional support is needed, please contact Dave Rakel at 937-865-4203.

Sincerely,

Michael D. Ebben
Site Manager

ME/jg

Enclosures

cc: T. Fischer, USEPA, (1) w/attachments
B. Nickel, OEPA, (1) w/attachments
S. Helmer, ODH, (1) w/attachments
J. Crombie, ODH, (1) w/attachments
M. Wojciechowski, Tetra Tech, (1) w/attach
G. Gorsuch, DOE/MCP, (1) w/attachments
R. Tormey, DOE/OH, (1) w/attachments
G. Desai, DOE/HQ, (1) w/attachments
C. Kline, CH2M Hill, (1) w/attachments
Public Reading Room (1) w/attachments
Admin Records, CH2M Hill, (2) w/attachs
ER Records, CH2M Hill, (1) w/attachs
DCC (1) w/attachments
M. Ebben, CH2M Hill, w/o attachments
K. Armstrong, CH2M Hill, w/o attachments
D. Rakel, CH2M Hill, w/o attachments
D. Kramer, CH2M Hill, w/o attachments
J. Fontaine, CH2M Hill, w/o attachments
S. Barr, CH2M Hill, w/o attachments
M. McDougal, CH2M Hill, w/o attachments
file, CH2M Hill, w/o attachments

UGL PARTIAL VII
REMOVAL ACTION
OSC REPORT

This Report Closes PRSs 155-159 & WD Footprint

July 2006

Final

Department of Energy
Miamisburg Closure Project

CH2MHILL

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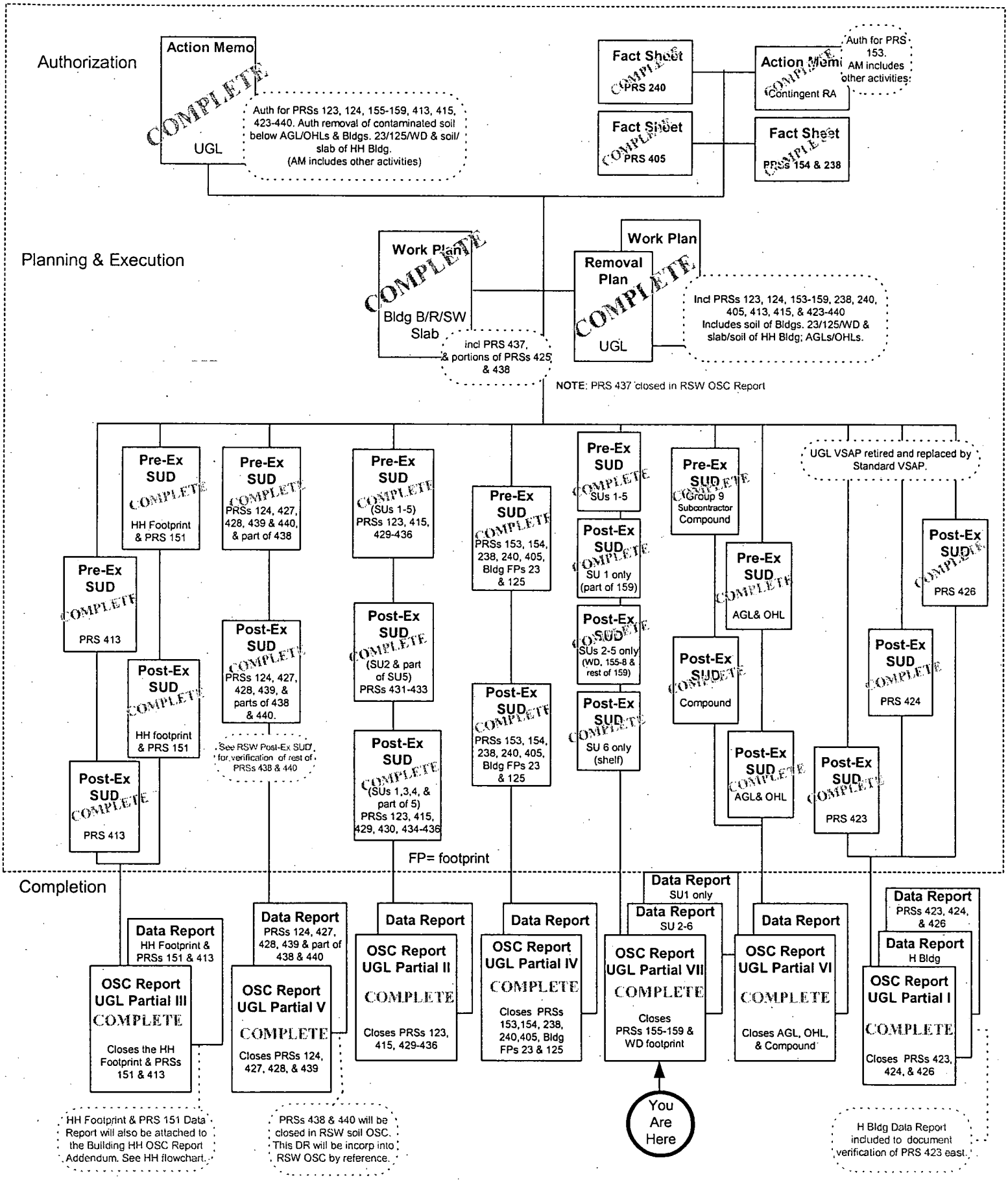
UGL (Underground Waste Transfer Lines) (AKA Group 9):

PRSs 123, 124, 153-159, 238, 240, 405, 413, 415, 423-440.

Includes soil below AGL/OHL & Bldgs 23, 125, HH, & WD. Includes work planning and verification for PRS 440



27june06 kma

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Attachment B	Data Report : PRS 159 (SU1) SD Beds
Attachment C	General Media Information

Acronyms

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CO	cleanup objective
COC	contaminant of concern
cy	cubic yards
DOE	Department of Energy
dpm	disintegrations per minute
Ex	excavation
HS	hot spot
MCP	Miamisburg Closure Project
OEPA	Ohio Environmental Protection Agency
OSC	On-Scene Coordinator
pCi/g	picoCuries per gram
PRP	Potentially Responsible Parties
PRS	Potential Release Site
RA	Removal Action
SUD	Survey Unit Design
UCL	upper confidence limit
UGL	underground line
USEPA	United States Environmental Protection Agency
VSAP	Verification Sampling and Analysis Plan

RECOMMENDATION: PRSs 155-159 & WD Footprint

The Potential Release Sites (PRSs) 155-159 and WD Footprint Removal Actions (RAs) were authorized via the Underground Line (UGL) Action Memo (Final, September 2003). The RAs were based on historical processes, and radiological surveys and soil sample results which showed elevated levels of Ac-227, Pa-231, Pb-210, Pu-238, Ra-226, Th-230, and Th-232.

Radiologically contaminated soil was excavated per the UGL Action Memo, the UGLs Removal Plan (Final, April 2004), and Standard Work Package ELT-MND-105-00 (April 2004). Verification sampling was performed per the associated Action Memo, the UGLs Removal Plan, and the Standard VSAP Soils Verification Sampling & Analysis Plan [VSAP], Final, August 2004 to demonstrate that the remaining soil meets the cleanup criteria. This removal action was successfully completed and resulted in excavation and disposal of approximately 34,009 cubic yards (cy) of radioactively contaminated soil (for disposal at Envirocare).

The soil cleanup criteria established in the Standard VSAP are satisfied if all verification sample results are below cleanup objectives (COs) or all sample results are below hot spot (HS) criteria <u>and</u> the 95% UCL (upper confidence limit) for the area of interest is less than the CO and the data set passes the Sign test.

The hard surfaces cleanup criteria established in the Standard VSAP are satisfied if all results meet the most stringent of the surface free release criteria (average of results less than 100 disintegrations per minute (dpm) per 100cm^2 and maximum result not greater than 300 dpm/100 cm^2). The hard surfaces cleanup criteria also require that if any results are greater than the CO (100 dpm/100 cm^2), the 95% UCL for the area of interest is less than the CO and the data set passes the Sign test.

Verification sampling documents that the soil and hard surfaces cleanup criteria were met.

After a thorough review of this On-Scene Coordinator (OSC) Report, the Core Team agrees that these RAs are complete, and that all previously existing environmental issues associated with them have been resolved.

Paul L 7/6/06

Paul Lucas, OSC
U.S. Department of Energy
Springdale, Ohio

Timothy J. Fischer 7/6/06

Timothy J. Fischer, Remedial Project Manager
USEPA
Chicago, Illinois

6/29/06

Brian Nickel, Project Manager
OEPA

1.0 SUMMARY OF EVENTS

This section describes the site background and events leading up to the removal action (RA), parties involved in responding to the RA, cleanup objective (CO) determination, chronological narrative of the RA, and resources committed to complete the project.

1.1 Site Conditions and Background

Background. The Underground Line (UGL) RA addresses transfer lines (aboveground, underground, and overhead) used to connect sumps and process lines from within T, R, SW, and H Buildings to the WD process treatment facility for treatment of generated radiologically contaminated liquid and sediment waste. Multiple field efforts were performed, each addressing a portion of the overall UGL project. Multiple On-Scene Coordinator (OSC) Reports were prepared, each closing out a portion of the overall UGL project. This is the last UGL project OSC Report.

Removal Action. This OSC Report documents completion of Potential Release Sites (PRSs) 155-159 RAs; all of which were authorized by the UGL Action Memo, Final, September 2003. The level of soil contamination warranted a RA under CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act). The location of UGL VII Area is shown on Figure 1 of Appendix A (See A7/146). The locations of PRSs 155-159 are shown on Figure 2 (see A8/146).

Verification sampling and analysis was performed in accordance with the UGLs Removal Plan, Final, April 2004; the Standard VSAP, Soils Verification Sampling & Analysis Plan [VSAP], Final, August 2004; and Post-Excavation (Ex) Survey Unit Designs (SUDs). Excerpts of the associated SUDs are included in Appendix C of Attachments A and B to this OSC Report. Verification sampling was performed and the results demonstrate that the remaining soil and hard surfaces meet the cleanup criteria. Hard surfaces were remediated as part of this RA and documented in Attachment A to this OSC Report.

Since the Department of Energy (DOE) is the sole responsible party for verification of these PRSs, no Potentially Responsible Parties (PRPs) were sought to clean up the site. Monsanto Research Corporation, EG&G Mound Applied Technologies, and BWXT of Ohio, Inc were the operating contractors at the site from 1948 to 30 September 1988, from 1 October 1988 until 30 September 1997, and from 1 October 1997 until 31 December 2002 respectively. CH2M Hill Mound, Inc. became the site contractor for the Miamisburg Closure Project (MCP) effective January 1, 2003.

1.2 Organization of the Removal Actions

Table 1 lists the parties responding to the removal actions, and their responsibilities.

Table 1: Organization of the Removal Action

US Environmental Protection Agency (USEPA) SFR-5J 77 W. Jackson Street Chicago, IL 60604 312-353-2000	Timothy J. Fischer	Federal agency responsible for oversight
Ohio Environmental Protection Agency (OEPA) 401 E. Fifth Street Dayton, OH 45402-2911 937-285-6357	Brian K. Nickel	State agency responsible for oversight
US Dept. of Energy Miamisburg Closure Project 175 Tri-County Parkway Springdale, OH 45246 513-246-0071	Paul Lucas	On-scene Coordinator responsible for oversight and success
CH2M HILL Environmental Restoration Project 1075 Mound Road Miamisburg, OH 45343-3030 937-608-8220	Jim Fontaine	Provide OSC with technical assistance, administrative support, field oversight, sample management, site safety, photo, site documentation, and preparation of the OSC Report

1.3 Objectives

Documentation Objective. The objectives of this OSC Report are to describe the RA fieldwork and document successful completion of the project. Material quantities and disposition locations are presented in Table 2.

Table 2: Materials and Disposition

Type of Material	Quantity (cy)	Disposal Method	Disposal/ Transportation	Disposal Location
Contaminated soil	34,009	Rail transport	$3,911,035	Envirocare of Utah

Because this is the last partial OSC Report, complete costs are presented in Table 3 below for all portions of the UGL project.

Table 3: Removal Cost

Cost Category	Cost
Planning/Fieldwork/ Restoration/grading/seeding	$4,047,319
Subcontractors (Verification Sampling, Analyses, & Data Validation)	
Closure Documentation	
Estimated Total Project Cost	$4,047,319

Cleanup Objective. Contaminants of Concern (COCs) and COs are identified in Table 4. COCs associated with individual areas are identified on page A53/146.

Table 4: Soil Cleanup Objectives (pCi/g)

COC	Cleanup Objective	Hot Spot Criteria
Actinium-227 +D	4.6	13.61
Lead-210 +D	7.4	19.8
Protactinium-231 +D	4.0	11.81
Plutonium-238	55	165
Radium-226 +D	2.9	4.7
Thorium-230 +D	2.8	4.6
Thorium-232 +D	2.1	3.5

+D: indicates that daughter product activity is included in the CO.

Hard Surfaces Cleanup Objective (dpm/100cm^2)

Pu-238	average < 100 & maximum < 300

All final soil verification results were below their respective COs as identified in the following Data Reports:

UGL Partial VII Data Report, PRSs 155-159 (SUs 2-6 only), Building 23 Footprint (western portion), and WD Footprint, Rev. 0, July 2006 (Attachment A to this OSC Report). Verification results are presented in Table 1 (Page A19/146). All results are below Hot Spot criteria. All results are below CO with the exception of three results for Pu-238 of 87, 98, and 149 pCi/g (CO of 55 pCi/g) and one verification result for Th-230 of 4.26 pCi/g (CO of 2.8 pCi/g). All other results (except Tl-208) are below CO. The Tl-208 10-5 Risk-Based Guideline Value (RBGV) based on the most conservative of Construction Worker and Site Employee scenarios is 0.498 pCi/g and is not inclusive of background or daughter product activity. One result of Tl-208 was 0.53 pCi/g, exceeding the RBGV of 1.17 pCi/g. Tl-208 is a daughter product in equilibrium with its parent Th-232. The CO for Th-232 accounts for daughter product activity; therefore, these results are not considered significant and are not evaluated further. All final hard surface verification results were below the CO as identified on page A138/146 and A115a/146, with the exception of two results of 104 and 112 dpm/100cm^2.

PRS 159 (SU1) SD Beds Data Report, Rev. 0, Final, March 2006 (Attachment B to this OSC Report). Characterization results are presented in Table 1 (Page B10/31). All results are below Hot Spot criteria. All results are below CO.

Hot Spot Criteria. The Hot Spot criteria for the COCs are presented in Table 4 above. There were no sample results that exceeded the hot spot criteria for any analyte.

Cleanup Criteria. The soil cleanup criteria are satisfied if all verification sample results are below CO or all sample results are below hot spot (HS) criteria and the 95% UCL (upper confidence limit) for the area of interest is less than the CO and the data set passes the Sign test.

Hard surfaces are evaluated by direct and swipe measurement results. The hard surfaces cleanup criteria established in the Standard VSAP are satisfied if all results meet the most stringent of the surface free release criteria (average of results less than 100 disintegrations per minute (dpm) per 100cm^2 and maximum result not greater than 300 dpm/100 cm^2) presented in the Work Plan for Environmental Restoration of the DOE Mound Site, The Mound 2000 Approach, Final, Rev. 0, February 1999 (Attachment A, Table 1). The hard surfaces cleanup criteria also require that if any results are greater than the CO (100 dpm/100 cm^2), the 95% UCL for the area of interest is less than the CO and the data set passes the Sign test.

Soil and hard surface verification confirmed all remaining surfaces meet the cleanup criteria.

1.4 Chronological Narrative of the Removal Actions

Table 5 presents a chronological narrative of events surrounding the RAs.

Table 5: Chronology of RA

Timeframe	Activity
August 2003	UGL RA authorized.
April 2004	UGL Removal Plan approved.
June 2005 – March 2006	RA fieldwork performed.
October 2005- April 2006	Verification sampling & analysis performed.
June 2006	OSC Report prepared.

2.0 EFFECTIVENESS OF THE REMOVAL ACTIONS

The removal actions are complete, and the objectives of the Action Memorandum have been met. The limits of verification are identified on Figures 4 and 5 (see A10 & 11/146) and Figure 2 (see B8/31). Results of verification and characterization sampling and analysis are provided in Attachments A and B.

2.1 Actions Taken by Mound Personnel

CH2M Hill Mound, Inc. personnel planned and performed removal action oversight, and performed excavation, monitoring, sampling and analyses, and documentation. The project met the removal action objectives (Section 1.3), as outlined in the Action Memorandum. CH2M Hill Mound, Inc. personnel prepared this OSC Report, which shows that the Removal Action objectives were achieved.

2.2 Actions Taken by Local, State, and Federal Agencies

The DOE/MCP was the lead agency for the RA and provided the funding. DOE, USEPA, and OEPA had oversight responsibility for the RA and review of the Action Memorandum and OSC Report to ensure that the objectives were met.

2.3 Actions Taken by Subcontractors

Subcontractors involved in the project included:

- Earthline Inc. (Ashtabula, OH) – performed excavation and transportation of soil to the soil staging area.
- Severn Trent Laboratory (St. Louis, MO) – analyzed verification samples.
- Terran (Dayton, OH) - performed site soil sampling, data management, and validation.
- Envirocare (Clive, UT) - disposal of radiologically contaminated waste via rail transport.
- SK Construction (Middletown, OH) – provided restoration support (placed backfill material).

3.0 DIFFICULTIES ENCOUNTERED

3.1 Items that Affect the Removal Actions

No difficulties were encountered during the removal actions.

3.2 Issues of Intergovernmental Coordination

All DOE/OEPA/USEPA interactions were good. The agencies were updated informally on a regular basis, and formally at monthly Core Team meetings. The Mound 2000 Process worked well.

4.0 RECOMMENDATIONS

4.1 Means to Prevent a Recurrence

The contaminated soil was removed. Mound Removal Actions have regulator-approved work plans, each of which has a section that addresses runon/runoff controls. In

addition, the site Storm Water Pollution Prevention Plan applies to the entire site and is monitored by the Environmental Compliance and Analytical Services group. As a result of the removal and implementation of runon/runoff protection, spread of contamination is prevented. After the removal action and the CERCLA process for the parcel are complete, the area will be transferred from Federal to private ownership. All State and Federal disposal rules will apply.

ATTACHMENT A

DATA REPORT

UGL PARTIAL VII (SUs 2-6)

UGL Partial VII DATA REPORT

PRSs 155-159 (SUs 2-6 only), Building 23 Footprint (western portion), & WD Footprint

July 2006

Rev. 0

Department of Energy

Miamisburg Closure Project

CH2MHILL

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Acronyms

Ex	Excavation
pCi/g	picoCuries per gram
PRS	Potential Release Site
QC	quality control
RA	removal action
R&V	review and validation
SU	Survey Unit
SUD	Survey Unit Design
UGL	underground line
VSAP	Verification Sampling and Analysis Plan

1.0 PURPOSE

This Data Report provides documentation of sampling activities conducted in accordance with the Standard VSAP, Soils Verification Sampling and Analysis Plan [VSAP], Final, August 2004; required to close out Potential Release Sites (PRSs 155-159 and WD Footprint).

The purposes of this Data Report are to:

- document any variances to the VSAP/Post-Excavation (Ex) Survey Unit Designs (SUDs),
- present statistical and bias data (separately),
- present summary statistics and statistical analyses of the applicable data, including retrospective power curve, and
- provide documentation of data review and validation.

2.0 DOCUMENT ORGANIZATION / SUMMARY

The underground line (UGL) removal action (RA) consists of multiple sample events, each known as an "UGL Partial". This Data Report is for UGL Partial VII, which includes PRSs 155-159 and WD Footprint (Survey Units (SUs) 2-6 only). The location of the UGL Partial VII Area is shown on Figure 1. The location of PRSs 155-159 and Buildings 23 and WD Footprints are shown on Figure 2. PRSs and SUs are shown on Figure 3.

Verification data for the eastern half of Building 23 footprint is included in the UGL Partial IV Data Report, Rev.0, June 2006 (see SU3). Verification data for the western half of Building 23 footprint is included herein (within SU4). The Building 23 footprint is closed via the UGL Partial IV OSC Report.

Unless otherwise specified as a variance, sampling and analyses were conducted in accordance with the VSAP and Post-Ex SUDs. A variance to the Post-Ex SUD occurred at SU6. Two locations (342 and 343) were covered and inaccessible due to large amounts of soil, verified as part of PRS 124 (UGL Partial V), that sloughed onto the shelf. Sampling of locations 342 and 343 did not occur.

For SU6, per the Post-Ex SUD, surrogate samples were collected on a 15-foot grid (offset from the verification locations) in lieu of a walkover survey.

3.0 FIELD ACTIVITIES

Verification sampling activities occurred from October 2005 through April 2006. Verification locations are shown on Figures 4 and 5. Verification results for SUs 2-5 are presented in Table 1. Data for hard surfaces at SU2 and walkover surveys for SUs 2-5 are presented in Appendix F. Verification results for SU6 are included in Appendix D. The investigation was conducted in accordance with the Standard VSAP, Soils Verification Sampling and Analysis Plan, Final August 2004.

Surface soil samples were collected in accordance with the procedures presented in the Mound Methods Compendiums S-001, S-002, S-020, S-028, S-029, and Q-002. Samples were collected and composited in-situ using the stainless steel trowels and placed in ½ liter plastic containers with lids. In some cases, a rock hammer or spud bar was used to loosen the soil prior to sample collection. Several locations were submerged within standing pools of water or not readily accessible for sampling personnel. Samples from these locations were collected using a trackhoe and composited using stainless steel trowels and bowls. All equipment was thoroughly decontaminated using non-phosphate detergent and distilled water between sample locations. The samples were field-screened by a radiological control technician at the site and screened by the Mound Soil Screening Laboratory prior to shipment to the contract laboratory.

4.0 DATA REVIEW / VALIDATION

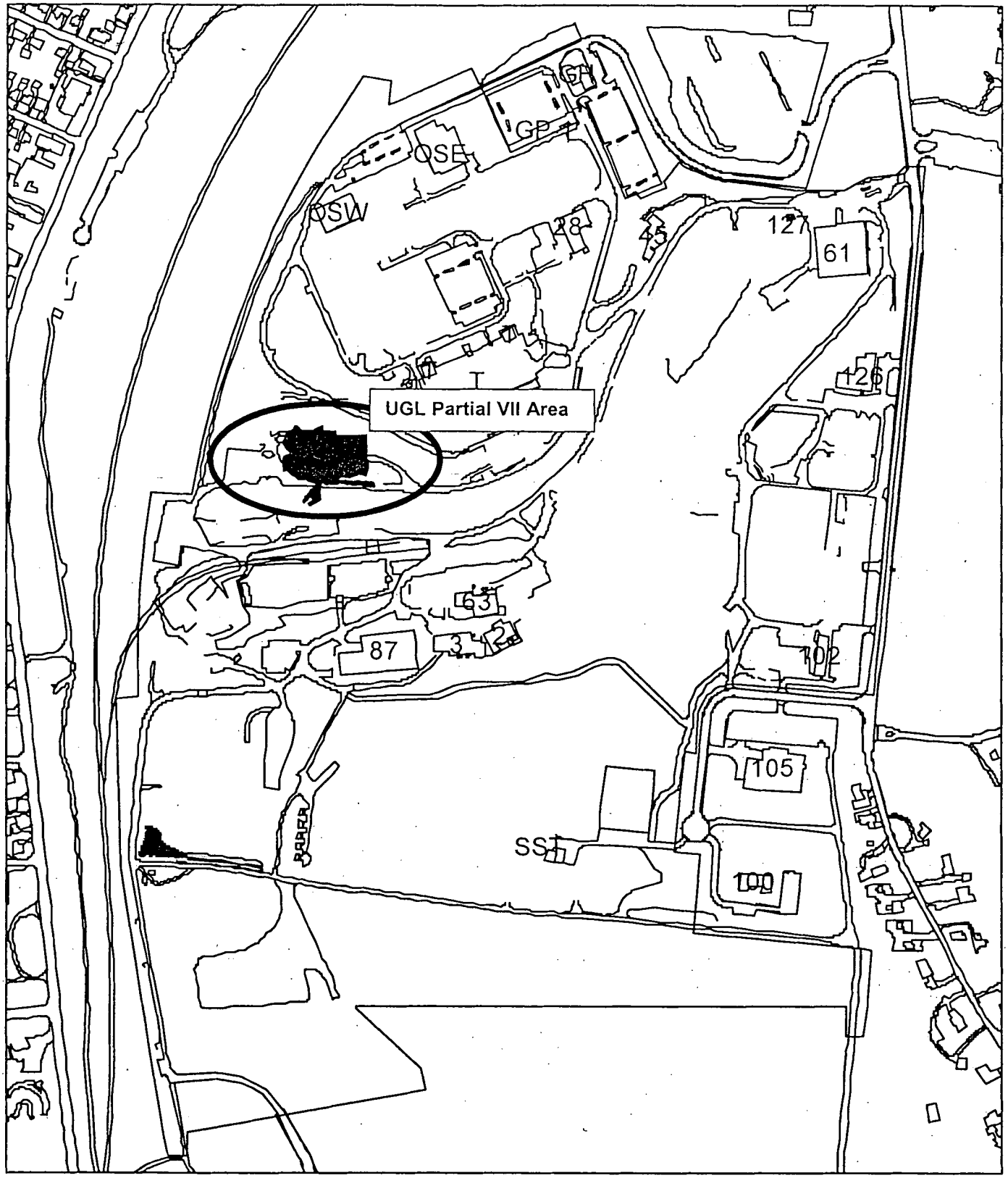
All data were reviewed and 10% of offsite data were validated.

Field and laboratory QC (quality control) were assessed as part of the data review and validation (R&V) process.

Documentation of review and validation (and related variances) is provided in Appendix E. Review and validation supports that the data are usable.

APPENDIX A

FIGURES



Scale in feet

0 200400 600 8001000

N

Figure 1:
Location of UGL Partial VII Area

A7/146

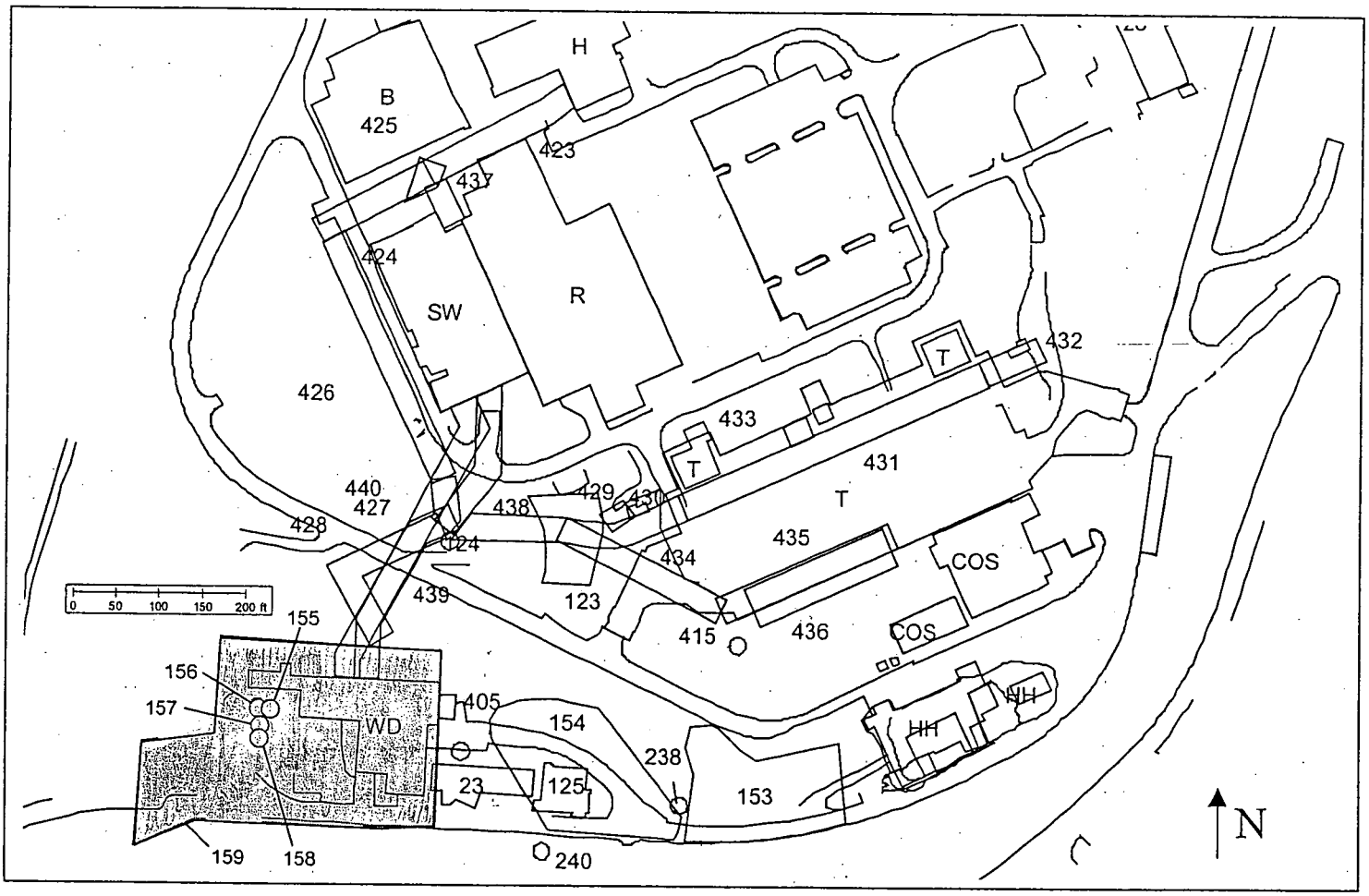


Figure 2: Location of PRSs 155-159 & Buildings 23 and WD Footprints

A8/146

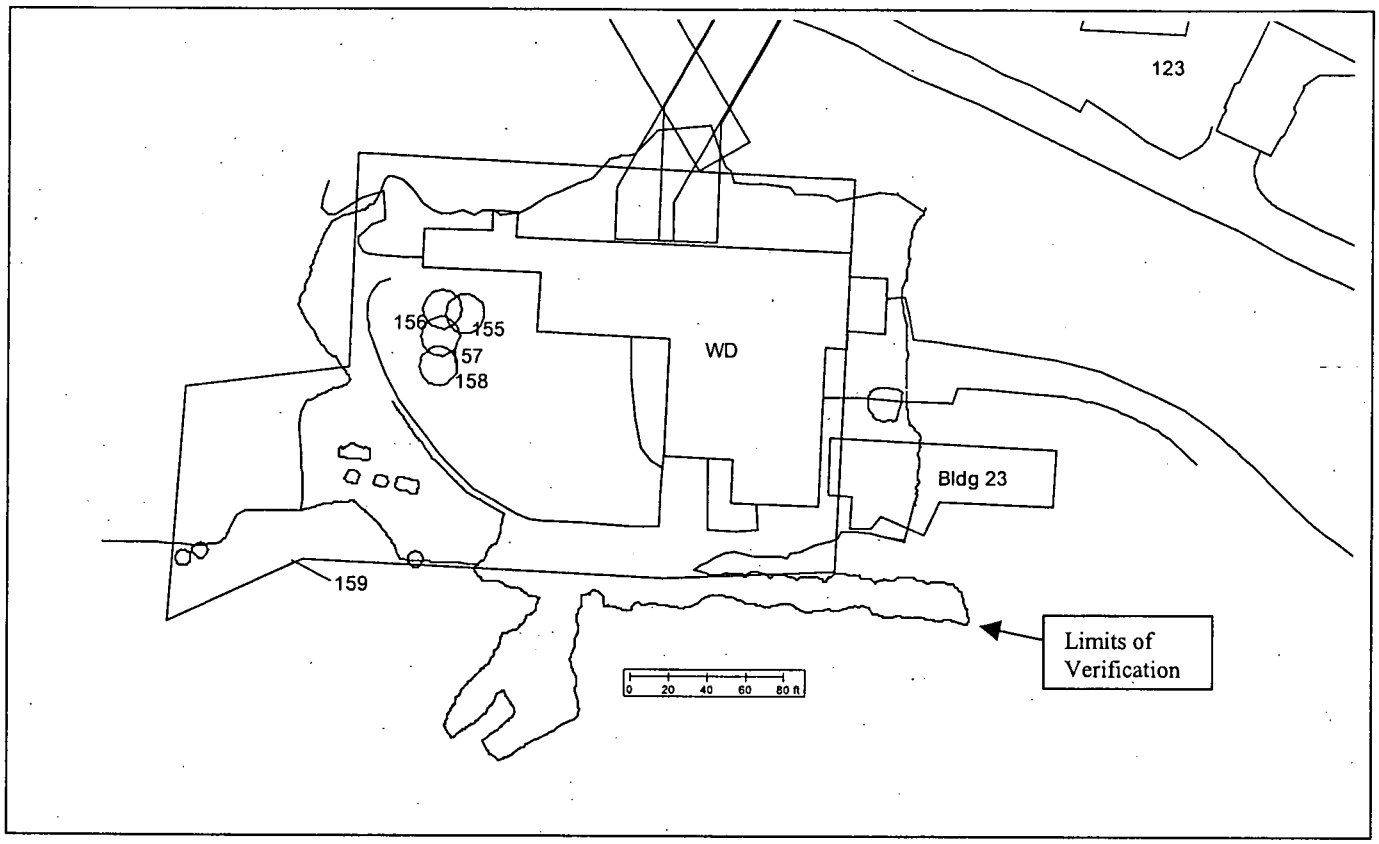


Figure 3: Location of PRSs and Building Footprints

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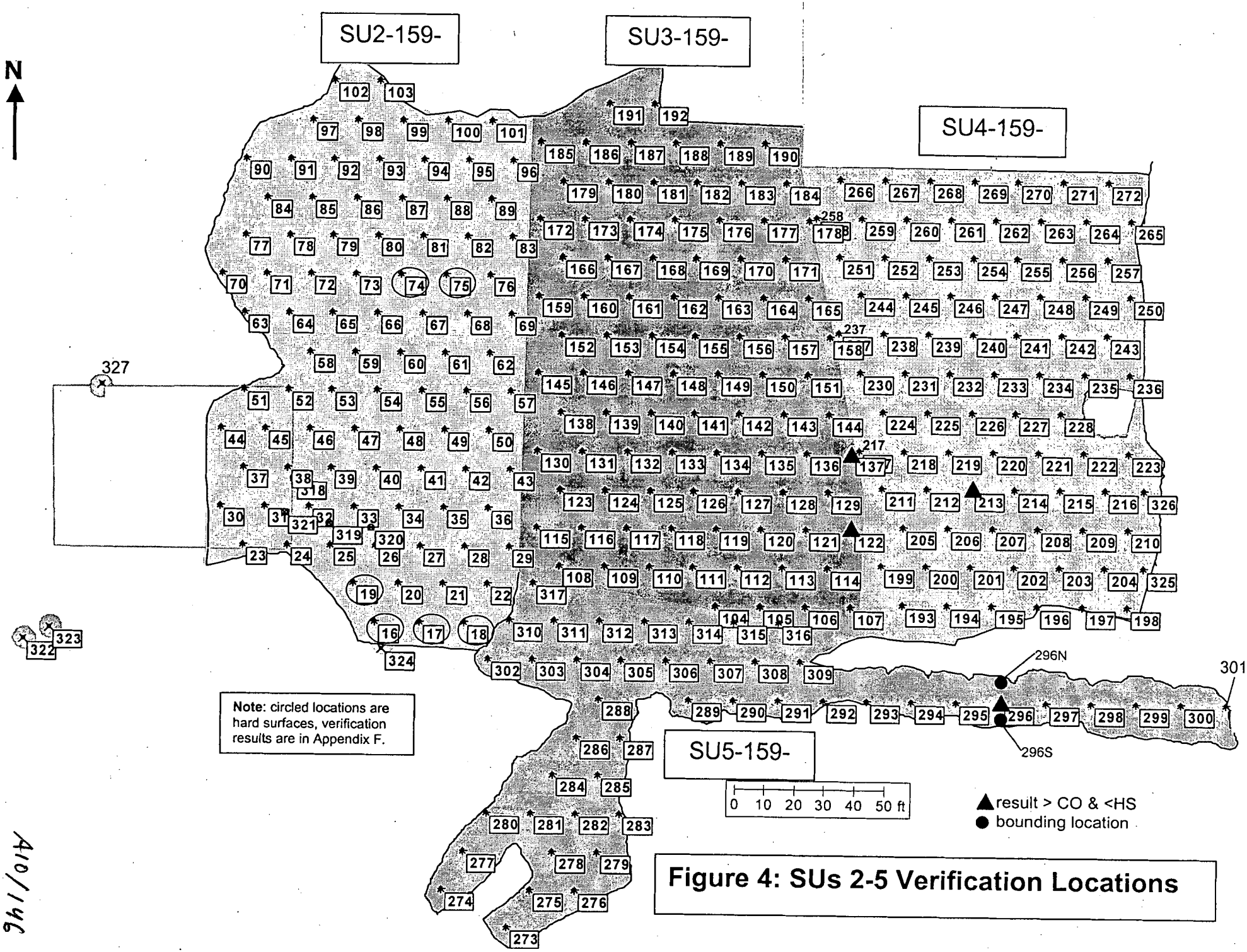

Figure 4: SUs 2-5 Verification Locations

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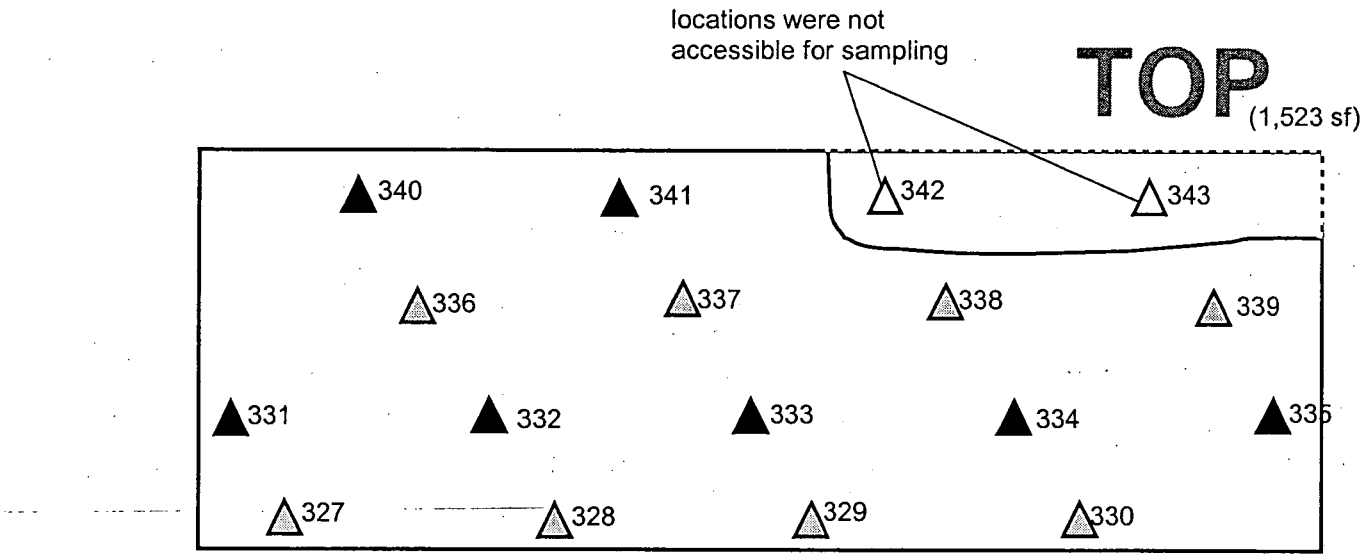
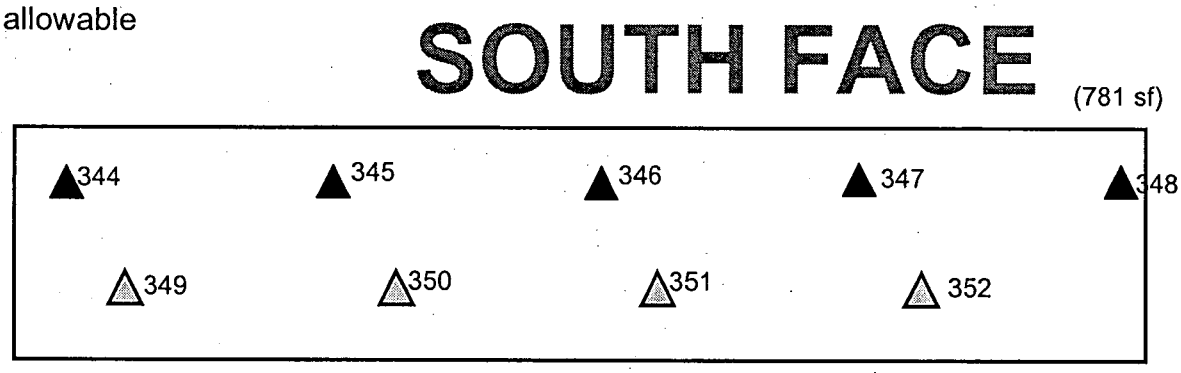
Figure 5: SU6 (Shelf) Verification Locations

Note: all exposed surfaces are shown below.

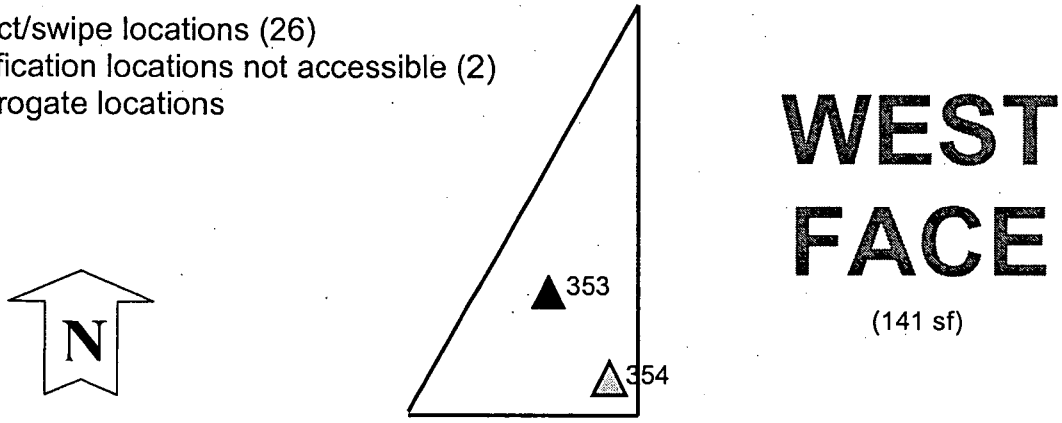


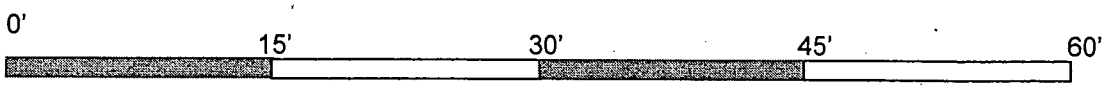
Note: all locations less than maximum allowable



NOTE: all sample IDs begin with SU6-159-

▲ direct/swipe locations (26)
△ verification locations not accessible (2)
△ surrogate locations





A11/146

APPENDIX B

TABLES

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-020	02/13/2006	Actinium-227	4.6	0.310	0.310	U	U	1464478.798	598382.189
SU2-159-020	02/13/2006	Americium-241	63	0.110	0.110	U	UJ	1464478.798	598382.189
SU2-159-020	02/13/2006	Bismuth-207	1.2	0.051	0.051	U	U	1464478.798	598382.189
SU2-159-020	02/13/2006	Bismuth-210M	8.3	0.054	0.054	U	UJ	1464478.798	598382.189
SU2-159-020	02/13/2006	Cesium-137	3.8	0.046	0.046	U	UJ	1464478.798	598382.189
SU2-159-020	02/13/2006	Cobalt-60	0.7	0.034	0.034	U	UJ	1464478.798	598382.189
SU2-159-020	02/13/2006	Lead-210	7.4	1.200	1.200	U	UJ	1464478.798	598382.189
SU2-159-020	02/13/2006	Lead-212	16.6	0.182	0.076			1464478.798	598382.189
SU2-159-020	02/13/2006	Lead-214	8.9	0.266	0.082			1464478.798	598382.189
SU2-159-020	02/13/2006	Plutonium-238	55	1.650	0.050			1464478.798	598382.189
SU2-159-020	02/13/2006	Plutonium-239/240	62	0.044	0.044	U	UJ	1464478.798	598382.189
SU2-159-020	02/13/2006	Potassium-40	47.8	3.780	0.390			1464478.798	598382.189
SU2-159-020	02/13/2006	Protactinium-231	4	1.200	1.200	U	UJ	1464478.798	598382.189
SU2-159-020	02/13/2006	Radium-226	2.9	0.240	0.190	J	J	1464478.798	598382.189
SU2-159-020	02/13/2006	Radium-228	2.1	0.270	0.270	U	U	1464478.798	598382.189
SU2-159-020	02/13/2006	Thorium-228	2.6	0.205	0.058			1464478.798	598382.189
SU2-159-020	02/13/2006	Thorium-230	2.8	0.610	0.030			1464478.798	598382.189
SU2-159-020	02/13/2006	Thorium-232	2.1	0.320	0.020			1464478.798	598382.189
SU2-159-021	02/13/2006	Actinium-227	4.6	0.210	0.210	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Americium-241	63	0.089	0.089	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Bismuth-207	1.2	0.046	0.046	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Bismuth-210M	8.3	0.061	0.061	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Cesium-137	3.8	0.073	0.073	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Cobalt-60	0.7	0.081	0.081	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Lead-210	7.4	1.300	1.300	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Lead-212	16.6	0.184	0.059			1464493.798	598382.189
SU2-159-021	02/13/2006	Lead-214	8.9	0.350	0.090			1464493.798	598382.189
SU2-159-021	02/13/2006	Plutonium-238	55	2.690	0.040			1464493.798	598382.189
SU2-159-021	02/13/2006	Plutonium-239/240	62	0.042	0.042	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Potassium-40	47.8	4.800	0.700			1464493.798	598382.189
SU2-159-021	02/13/2006	Protactinium-231	4	1.100	1.100	U	UJ	1464493.798	598382.189
SU2-159-021	02/13/2006	Radium-226	2.9	0.290	0.210	J	J	1464493.798	598382.189
SU2-159-021	02/13/2006	Radium-228	2.1	0.290	0.290	U	U	1464493.798	598382.189
SU2-159-021	02/13/2006	Thorium-228	2.6	0.470	0.030			1464493.798	598382.189
SU2-159-021	02/13/2006	Thorium-230	2.8	0.560	0.030			1464493.798	598382.189
SU2-159-021	02/13/2006	Thorium-232	2.1	0.255	0.027			1464493.798	598382.189
SU2-159-022	02/13/2006	Actinium-227	4.6	0.290	0.290	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Americium-241	63	0.100	0.100	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Bismuth-207	1.2	0.065	0.065	U	U	1464508.798	598382.189
SU2-159-022	02/13/2006	Bismuth-210M	8.3	0.065	0.065	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Cesium-137	3.8	0.059	0.059	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Cobalt-60	0.7	0.068	0.068	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Lead-210	7.4	1.600	1.600	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Lead-212	16.6	0.118	0.082			1464508.798	598382.189
SU2-159-022	02/13/2006	Lead-214	8.9	0.330	0.080			1464508.798	598382.189
SU2-159-022	02/13/2006	Plutonium-238	55	4.620	0.040			1464508.798	598382.189
SU2-159-022	02/13/2006	Plutonium-239/240	62	0.031	0.029	J	J	1464508.798	598382.189
SU2-159-022	02/13/2006	Potassium-40	47.8	4.500	1.000			1464508.798	598382.189
SU2-159-022	02/13/2006	Protactinium-231	4	1.200	1.200	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Radium-226	2.9	0.360	0.250	J	J	1464508.798	598382.189
SU2-159-022	02/13/2006	Radium-228	2.1	0.350	0.350	U	UJ	1464508.798	598382.189
SU2-159-022	02/13/2006	Thorium-228	2.6	0.260	0.050			1464508.798	598382.189
SU2-159-022	02/13/2006	Thorium-230	2.8	0.470	0.040			1464508.798	598382.189
SU2-159-022	02/13/2006	Thorium-232	2.1	0.241	0.033			1464508.798	598382.189
SU2-159-023	02/13/2006	Actinium-227	4.6	0.270	0.270	U	U	1464426.298	598395.179
SU2-159-023	02/13/2006	Americium-241	63	0.099	0.099	U	UJ	1464426.298	598395.179
SU2-159-023	02/13/2006	Bismuth-207	1.2	0.042	0.042	U	UJ	1464426.298	598395.179
SU2-159-023	02/13/2006	Bismuth-210M	8.3	0.054	0.054	U	UJ	1464426.298	598395.179
SU2-159-023	02/13/2006	Cesium-137	3.8	0.059	0.059	U	UJ	1464426.298	598395.179
SU2-159-023	02/13/2006	Cobalt-60	0.7	0.058	0.058	U	UJ	1464426.298	598395.179
SU2-159-023	02/13/2006	Lead-210	7.4	1.400	1.400	U	UJ	1464426.298	598395.179

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-023	02/13/2006	Lead-212	16.6	0.072	0.068			1464426.298	598395.179
SU2-159-023	02/13/2006	Plutonium-238	55	3.870	0.050			1464426.298	598395.179
SU2-159-023	02/13/2006	Plutonium-239/240	62	0.038	0.013	J	J	1464426.298	598395.179
SU2-159-023	02/13/2006	Potassium-40	47.8	2.070	0.580			1464426.298	598395.179
SU2-159-023	02/13/2006	Protactinium-231	4	1.000	1.000	U	UJ	1464426.298	598395.179
SU2-159-023	02/13/2006	Radium-226	2.9	0.170	0.170	U	U	1464426.298	598395.179
SU2-159-023	02/13/2006	Radium-228	2.1	0.230	0.230	U	U	1464426.298	598395.179
SU2-159-023	02/13/2006	Thorium-228	2.6	0.205	0.057			1464426.298	598395.179
SU2-159-023	02/13/2006	Thorium-230	2.8	0.360	0.040			1464426.298	598395.179
SU2-159-023	02/13/2006	Thorium-232	2.1	0.144	0.032			1464426.298	598395.179
SU2-159-024	02/13/2006	Actinium-227	4.6	0.180	0.180	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Americium-241	63	0.073	0.073	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Bismuth-207	1.2	0.033	0.033	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Bismuth-210M	8.3	0.053	0.053	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Cesium-137	3.8	0.066	0.066	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Cobalt-60	0.7	0.077	0.077	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Lead-210	7.4	1.100	1.100	U	U	1464441.298	598395.179
SU2-159-024	02/13/2006	Lead-212	16.6	0.062	0.062	U	U	1464441.298	598395.179
SU2-159-024	02/13/2006	Plutonium-238	55	3.560	0.050			1464441.298	598395.179
SU2-159-024	02/13/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Potassium-40	47.8	0.860	0.350			1464441.298	598395.179
SU2-159-024	02/13/2006	Protactinium-231	4	0.950	0.950	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Radium-226	2.9	0.150	0.150	U	U	1464441.298	598395.179
SU2-159-024	02/13/2006	Radium-228	2.1	0.210	0.210	U	UJ	1464441.298	598395.179
SU2-159-024	02/13/2006	Thorium-228	2.6	0.145	0.047			1464441.298	598395.179
SU2-159-024	02/13/2006	Thorium-230	2.8	0.246	0.032			1464441.298	598395.179
SU2-159-024	02/13/2006	Thorium-232	2.1	0.123	0.020			1464441.298	598395.179
SU2-159-025	02/13/2006	Actinium-227	4.6	0.300	0.300	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Americium-241	63	0.140	0.140	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Bismuth-207	1.2	0.074	0.074	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Bismuth-210M	8.3	0.078	0.078	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Cesium-137	3.8	0.088	0.088	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Cobalt-60	0.7	0.084	0.084	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Lead-210	7.4	2.100	2.100	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Lead-212	16.6	0.241	0.140			1464456.298	598395.179
SU2-159-025	02/13/2006	Lead-214	8.9	0.480	0.120			1464456.298	598395.179
SU2-159-025	02/13/2006	Plutonium-238	55	1.950	0.040			1464456.298	598395.179
SU2-159-025	02/13/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Potassium-40	47.8	6.800	1.000			1464456.298	598395.179
SU2-159-025	02/13/2006	Protactinium-231	4	1.400	1.400	U	UJ	1464456.298	598395.179
SU2-159-025	02/13/2006	Radium-226	2.9	0.270	0.270	U	U	1464456.298	598395.179
SU2-159-025	02/13/2006	Radium-228	2.1	0.390	0.390	U	U	1464456.298	598395.179
SU2-159-025	02/13/2006	Thorium-228	2.6	0.360	0.050			1464456.298	598395.179
SU2-159-025	02/13/2006	Thorium-230	2.8	0.560	0.030			1464456.298	598395.179
SU2-159-025	02/13/2006	Thorium-232	2.1	0.350	0.030			1464456.298	598395.179
SU2-159-026	02/13/2006	Plutonium-238	55	5.240	0.040			1464471.298	598395.179
SU2-159-026	02/13/2006	Plutonium-239/240	62	0.094	0.013	J	J	1464471.298	598395.179
SU2-159-026	02/13/2006	Thorium-228	2.6	0.310	0.050			1464471.298	598395.179
SU2-159-026	02/13/2006	Thorium-230	2.8	0.530	0.020			1464471.298	598395.179
SU2-159-026	02/13/2006	Thorium-232	2.1	0.256	0.034			1464471.298	598395.179
SU2-159-027	02/13/2006	Plutonium-238	55	3.430	0.040			1464486.298	598395.179
SU2-159-027	02/13/2006	Plutonium-239/240	62	0.035	0.033	J	J	1464486.298	598395.179
SU2-159-027	02/13/2006	Thorium-228	2.6	0.285	0.047			1464486.298	598395.179
SU2-159-027	02/13/2006	Thorium-230	2.8	0.480	0.040			1464486.298	598395.179
SU2-159-027	02/13/2006	Thorium-232	2.1	0.274	0.015			1464486.298	598395.179
SU2-159-028	02/13/2006	Plutonium-238	55	3.760	0.040			1464501.298	598395.179
SU2-159-028	02/13/2006	Plutonium-239/240	62	0.056	0.031	J	J	1464501.298	598395.179
SU2-159-028	02/13/2006	Thorium-228	2.6	0.710	0.050			1464501.298	598395.179
SU2-159-028	02/13/2006	Thorium-230	2.8	1.040	0.040			1464501.298	598395.179
SU2-159-028	02/13/2006	Thorium-232	2.1	0.620	0.030			1464501.298	598395.179
SU2-159-029	02/13/2006	Plutonium-238	55	0.043	0.043	U	UJ	1464516.298	598395.179

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-029	02/13/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464516.298	598395.179
SU2-159-029	02/13/2006	Thorium-228	2.6	1.350	0.060			1464516.298	598395.179
SU2-159-029	02/13/2006	Thorium-230	2.8	0.990	0.040			1464516.298	598395.179
SU2-159-029	02/13/2006	Thorium-232	2.1	1.050	0.050			1464516.298	598395.179
SU2-159-030	02/13/2006	Plutonium-238	55	0.860	0.030			1464418.798	598408.170
SU2-159-030	02/13/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464418.798	598408.170
SU2-159-030	02/13/2006	Thorium-228	2.6	0.216	0.045			1464418.798	598408.170
SU2-159-030	02/13/2006	Thorium-230	2.8	0.500	0.020			1464418.798	598408.170
SU2-159-030	02/13/2006	Thorium-232	2.1	0.194	0.022			1464418.798	598408.170
SU2-159-031	02/13/2006	Plutonium-238	55	2.300	0.030			1464433.798	598408.170
SU2-159-031	02/13/2006	Plutonium-239/240	62	0.047	0.023	J	J	1464433.798	598408.170
SU2-159-031	02/13/2006	Thorium-228	2.6	0.252	0.059			1464433.798	598408.170
SU2-159-031	02/13/2006	Thorium-230	2.8	0.530	0.030			1464433.798	598408.170
SU2-159-031	02/13/2006	Thorium-232	2.1	0.255	0.019			1464433.798	598408.170
SU2-159-032	02/13/2006	Plutonium-238	55	3.870	0.030			1464448.798	598408.170
SU2-159-032	02/13/2006	Plutonium-239/240	62	0.108	0.023			1464448.798	598408.170
SU2-159-032	02/13/2006	Thorium-228	2.6	0.360	0.040			1464448.798	598408.170
SU2-159-032	02/13/2006	Thorium-230	2.8	0.530	0.030			1464448.798	598408.170
SU2-159-032	02/13/2006	Thorium-232	2.1	0.400	0.030			1464448.798	598408.170
SU2-159-033	02/13/2006	Plutonium-238	55	7.640	0.030			1464463.798	598408.170
SU2-159-033	02/13/2006	Plutonium-239/240	62	0.144	0.021			1464463.798	598408.170
SU2-159-033	02/13/2006	Thorium-228	2.6	0.770	0.040			1464463.798	598408.170
SU2-159-033	02/13/2006	Thorium-230	2.8	0.970	0.030			1464463.798	598408.170
SU2-159-033	02/13/2006	Thorium-232	2.1	0.690	0.020			1464463.798	598408.170
SU2-159-034	02/13/2006	Plutonium-238	55	2.530	0.030			1464478.798	598408.170
SU2-159-034	02/13/2006	Plutonium-239/240	62	0.051	0.028	J	J	1464478.798	598408.170
SU2-159-034	02/13/2006	Thorium-228	2.6	0.218	0.043			1464478.798	598408.170
SU2-159-034	02/13/2006	Thorium-230	2.8	0.319	0.031			1464478.798	598408.170
SU2-159-034	02/13/2006	Thorium-232	2.1	0.151	0.024			1464478.798	598408.170
SU2-159-035	02/13/2006	Plutonium-238	55	1.960	0.030			1464493.798	598408.170
SU2-159-035	02/13/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464493.798	598408.170
SU2-159-035	02/13/2006	Thorium-228	2.6	0.680	0.060			1464493.798	598408.170
SU2-159-035	02/13/2006	Thorium-230	2.8	0.770	0.040			1464493.798	598408.170
SU2-159-035	02/13/2006	Thorium-232	2.1	0.720	0.030			1464493.798	598408.170
SU2-159-036	02/13/2006	Plutonium-238	55	3.900	0.030			1464508.798	598408.170
SU2-159-036	02/13/2006	Plutonium-239/240	62	0.053	0.018	J	J	1464508.798	598408.170
SU2-159-036	02/13/2006	Thorium-228	2.6	0.610	0.040			1464508.798	598408.170
SU2-159-036	02/13/2006	Thorium-230	2.8	0.740	0.020			1464508.798	598408.170
SU2-159-036	02/13/2006	Thorium-232	2.1	0.610	0.020			1464508.798	598408.170
SU2-159-037	02/13/2006	Plutonium-238	55	2.570	0.030			1464426.298	598421.160
SU2-159-037	02/13/2006	Plutonium-239/240	62	0.045	0.020	J	J	1464426.298	598421.160
SU2-159-037	02/13/2006	Thorium-228	2.6	0.249	0.035			1464426.298	598421.160
SU2-159-037	02/13/2006	Thorium-230	2.8	0.490	0.030			1464426.298	598421.160
SU2-159-037	02/13/2006	Thorium-232	2.1	0.276	0.028			1464426.298	598421.160
SU2-159-038	02/13/2006	Plutonium-238	55	4.140	0.030			1464441.298	598421.160
SU2-159-038	02/13/2006	Plutonium-239/240	62	0.060	0.028	J	J	1464441.298	598421.160
SU2-159-038	02/13/2006	Thorium-228	2.6	0.390	0.030			1464441.298	598421.160
SU2-159-038	02/13/2006	Thorium-230	2.8	0.810	0.020			1464441.298	598421.160
SU2-159-038	02/13/2006	Thorium-232	2.1	0.358	0.014			1464441.298	598421.160
SU2-159-039	02/13/2006	Plutonium-238	55	3.540	0.020			1464456.298	598421.160
SU2-159-039	02/13/2006	Plutonium-239/240	62	0.049	0.018	J	J	1464456.298	598421.160
SU2-159-039	02/13/2006	Thorium-228	2.6	0.660	0.040			1464456.298	598421.160
SU2-159-039	02/13/2006	Thorium-230	2.8	0.850	0.040			1464456.298	598421.160
SU2-159-039	02/13/2006	Thorium-232	2.1	0.650	0.030			1464456.298	598421.160
SU2-159-040	02/13/2006	Plutonium-238	55	1.920	0.030			1464471.298	598421.160
SU2-159-040	02/13/2006	Plutonium-239/240	62	0.036	0.018	J	J	1464471.298	598421.160
SU2-159-040	02/13/2006	Thorium-228	2.6	0.990	0.030			1464471.298	598421.160
SU2-159-040	02/13/2006	Thorium-230	2.8	1.160	0.030			1464471.298	598421.160
SU2-159-040	02/13/2006	Thorium-232	2.1	0.950	0.030			1464471.298	598421.160
SU2-159-041	02/13/2006	Plutonium-238	55	2.010	0.030			1464486.298	598421.160
SU2-159-041	02/13/2006	Plutonium-239/240	62	0.025	0.025	U	U	1464486.298	598421.160

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-041	02/13/2006	Thorium-228	2.6	0.890	0.080			1464486.298	598421.160
SU2-159-041	02/13/2006	Thorium-230	2.8	0.870	0.070			1464486.298	598421.160
SU2-159-041	02/13/2006	Thorium-232	2.1	1.090	0.030			1464486.298	598421.160
SU2-159-042	02/13/2006	Plutonium-238	55	0.710	0.030			1464501.298	598421.160
SU2-159-042	02/13/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464501.298	598421.160
SU2-159-042	02/13/2006	Thorium-228	2.6	0.830	0.020			1464501.298	598421.160
SU2-159-042	02/13/2006	Thorium-230	2.8	0.770	0.030			1464501.298	598421.160
SU2-159-042	02/13/2006	Thorium-232	2.1	0.800	0.030			1464501.298	598421.160
SU2-159-043	02/13/2006	Plutonium-238	55	0.310	0.040			1464516.298	598421.160
SU2-159-043	02/13/2006	Plutonium-239/240	62	0.037	0.037	U	UJ	1464516.298	598421.160
SU2-159-043	02/13/2006	Thorium-228	2.6	0.650	0.200		J	1464516.298	598421.160
SU2-159-043	02/13/2006	Thorium-230	2.8	0.730	0.100			1464516.298	598421.160
SU2-159-043	02/13/2006	Thorium-232	2.1	0.910	0.100		J	1464516.298	598421.160
SU2-159-044	02/13/2006	Plutonium-238	55	3.100	0.030			1464418.798	598434.151
SU2-159-044	02/13/2006	Plutonium-239/240	62	0.077	0.025	J	J	1464418.798	598434.151
SU2-159-044	02/13/2006	Thorium-228	2.6	0.330	0.050			1464418.798	598434.151
SU2-159-044	02/13/2006	Thorium-230	2.8	0.560	0.040			1464418.798	598434.151
SU2-159-044	02/13/2006	Thorium-232	2.1	0.380	0.040			1464418.798	598434.151
SU2-159-045	02/13/2006	Plutonium-238	55	2.230	0.030			1464433.798	598434.151
SU2-159-045	02/13/2006	Plutonium-239/240	62	0.034	0.019	J	J	1464433.798	598434.151
SU2-159-045	02/13/2006	Thorium-228	2.6	0.420	0.040			1464433.798	598434.151
SU2-159-045	02/13/2006	Thorium-230	2.8	0.550	0.010			1464433.798	598434.151
SU2-159-045	02/13/2006	Thorium-232	2.1	0.307	0.013			1464433.798	598434.151
SU2-159-046	02/13/2006	Plutonium-238	55	2.120	0.050			1464448.798	598434.151
SU2-159-046	02/13/2006	Plutonium-239/240	62	0.072	0.039	J	J	1464448.798	598434.151
SU2-159-046	02/13/2006	Thorium-228	2.6	0.140	0.090	J	J	1464448.798	598434.151
SU2-159-046	02/13/2006	Thorium-230	2.8	0.450	0.070			1464448.798	598434.151
SU2-159-046	02/13/2006	Thorium-232	2.1	0.085	0.074	J	J	1464448.798	598434.151
SU2-159-047	02/14/2006	Plutonium-238	55	0.029	0.029	U	UJ	1464463.798	598434.151
SU2-159-047	02/14/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464463.798	598434.151
SU2-159-047	02/14/2006	Thorium-228	2.6	0.330	0.060			1464463.798	598434.151
SU2-159-047	02/14/2006	Thorium-230	2.8	0.610	0.050			1464463.798	598434.151
SU2-159-047	02/14/2006	Thorium-232	2.1	0.360	0.040			1464463.798	598434.151
SU2-159-048	02/14/2006	Plutonium-238	55	0.025	0.025	U	UJ	1464478.798	598434.151
SU2-159-048	02/14/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464478.798	598434.151
SU2-159-048	02/14/2006	Thorium-228	2.6	1.230	0.060			1464478.798	598434.151
SU2-159-048	02/14/2006	Thorium-230	2.8	0.850	0.050			1464478.798	598434.151
SU2-159-048	02/14/2006	Thorium-232	2.1	1.010	0.040			1464478.798	598434.151
SU2-159-049	02/14/2006	Plutonium-238	55	0.024	0.024	U	UJ	1464493.798	598434.151
SU2-159-049	02/14/2006	Plutonium-239/240	62	0.018	0.018	U	UJ	1464493.798	598434.151
SU2-159-049	02/14/2006	Thorium-228	2.6	1.120	0.100			1464493.798	598434.151
SU2-159-049	02/14/2006	Thorium-230	2.8	1.150	0.050			1464493.798	598434.151
SU2-159-049	02/14/2006	Thorium-232	2.1	1.710	0.070			1464493.798	598434.151
SU2-159-050	02/13/2006	Plutonium-238	55	0.273	0.030			1464508.798	598434.151
SU2-159-050	02/13/2006	Plutonium-239/240	62	0.026	0.026	U	UJ	1464508.798	598434.151
SU2-159-050	02/13/2006	Thorium-228	2.6	0.920	0.080			1464508.798	598434.151
SU2-159-050	02/13/2006	Thorium-230	2.8	0.770	0.060			1464508.798	598434.151
SU2-159-050	02/13/2006	Thorium-232	2.1	1.020	0.040			1464508.798	598434.151
SU2-159-051	02/13/2006	Plutonium-238	55	2.070	0.030		J	1464426.298	598447.141
SU2-159-051	02/13/2006	Plutonium-239/240	62	0.020	0.019	J	J	1464426.298	598447.141
SU2-159-051	02/13/2006	Thorium-228	2.6	0.200	0.082			1464426.298	598447.141
SU2-159-051	02/13/2006	Thorium-230	2.8	0.360	0.050			1464426.298	598447.141
SU2-159-051	02/13/2006	Thorium-232	2.1	0.166	0.070			1464426.298	598447.141
SU2-159-052	02/13/2006	Plutonium-238	55	3.020	0.030			1464441.298	598447.141
SU2-159-052	02/13/2006	Plutonium-239/240	62	0.048	0.017	J	J	1464441.298	598447.141
SU2-159-052	02/13/2006	Thorium-228	2.6	0.203	0.078			1464441.298	598447.141
SU2-159-052	02/13/2006	Thorium-230	2.8	0.330	0.040			1464441.298	598447.141
SU2-159-052	02/13/2006	Thorium-232	2.1	0.214	0.040			1464441.298	598447.141
SU2-159-053	02/13/2006	Plutonium-238	55	2.780	0.030			1464456.298	598447.141
SU2-159-053	02/13/2006	Plutonium-239/240	62	0.061	0.017	J	J	1464456.298	598447.141
SU2-159-053	02/13/2006	Thorium-228	2.6	0.440	0.070			1464456.298	598447.141

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-053	02/13/2006	Thorium-230	2.8	0.800	0.050			1464456.298	598447.141
SU2-159-053	02/13/2006	Thorium-232	2.1	0.520	0.050			1464456.298	598447.141
SU2-159-053D	02/13/2006	Plutonium-238	55	2.960	0.030			1464456.298	598447.141
SU2-159-053D	02/13/2006	Plutonium-239/240	62	0.050	0.018	J	J	1464456.298	598447.141
SU2-159-053D	02/13/2006	Thorium-228	2.6	0.420	0.060			1464456.298	598447.141
SU2-159-053D	02/13/2006	Thorium-230	2.8	0.790	0.040			1464456.298	598447.141
SU2-159-053D	02/13/2006	Thorium-232	2.1	0.430	0.050			1464456.298	598447.141
SU2-159-054	02/13/2006	Plutonium-238	55	0.780	0.030			1464471.298	598447.141
SU2-159-054	02/13/2006	Plutonium-239/240	62	0.026	0.026	U	UJ	1464471.298	598447.141
SU2-159-054	02/13/2006	Thorium-228	2.6	0.950	0.090			1464471.298	598447.141
SU2-159-054	02/13/2006	Thorium-230	2.8	0.910	0.050			1464471.298	598447.141
SU2-159-054	02/13/2006	Thorium-232	2.1	1.020	0.070			1464471.298	598447.141
SU2-159-055	02/13/2006	Plutonium-238	55	0.027	0.027	U	UJ	1464486.298	598447.141
SU2-159-055	02/13/2006	Plutonium-239/240	62	0.010	0.010	U	U	1464486.298	598447.141
SU2-159-055	02/13/2006	Thorium-228	2.6	1.110	0.070			1464486.298	598447.141
SU2-159-055	02/13/2006	Thorium-230	2.8	0.990	0.060			1464486.298	598447.141
SU2-159-055	02/13/2006	Thorium-232	2.1	1.110	0.070			1464486.298	598447.141
SU2-159-056	02/13/2006	Plutonium-238	55	0.028	0.028	U	UJ	1464501.298	598447.141
SU2-159-056	02/13/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464501.298	598447.141
SU2-159-056	02/13/2006	Thorium-228	2.6	1.140	0.090			1464501.298	598447.141
SU2-159-056	02/13/2006	Thorium-230	2.8	1.000	0.040			1464501.298	598447.141
SU2-159-056	02/13/2006	Thorium-232	2.1	1.290	0.060			1464501.298	598447.141
SU2-159-057	02/13/2006	Plutonium-238	55	0.037	0.037	U	UJ	1464516.298	598447.141
SU2-159-057	02/13/2006	Plutonium-239/240	62	0.031	0.031	U	UJ	1464516.298	598447.141
SU2-159-057	02/13/2006	Thorium-228	2.6	1.230	0.100			1464516.298	598447.141
SU2-159-057	02/13/2006	Thorium-230	2.8	1.050	0.060			1464516.298	598447.141
SU2-159-057	02/13/2006	Thorium-232	2.1	1.280	0.060			1464516.298	598447.141
SU2-159-058	02/13/2006	Plutonium-238	55	0.068	0.033	J	J	1464448.798	598460.131
SU2-159-058	02/13/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464448.798	598460.131
SU2-159-058	02/13/2006	Thorium-228	2.6	0.109	0.108			1464448.798	598460.131
SU2-159-058	02/13/2006	Thorium-230	2.8	0.400	0.080			1464448.798	598460.131
SU2-159-058	02/13/2006	Thorium-232	2.1	0.170	0.100			1464448.798	598460.131
SU2-159-059	02/13/2006	Plutonium-238	55	14.800	0.040			1464463.798	598460.131
SU2-159-059	02/13/2006	Plutonium-239/240	62	0.156	0.016			1464463.798	598460.131
SU2-159-059	02/13/2006	Thorium-228	2.6	0.380	0.020			1464463.798	598460.131
SU2-159-059	02/13/2006	Thorium-230	2.8	0.370	0.040			1464463.798	598460.131
SU2-159-059	02/13/2006	Thorium-232	2.1	0.177	0.045			1464463.798	598460.131
SU2-159-060	02/13/2006	Plutonium-238	55	0.113	0.041			1464478.798	598460.131
SU2-159-060	02/13/2006	Plutonium-239/240	62	0.026	0.026	U	UJ	1464478.798	598460.131
SU2-159-060	02/13/2006	Thorium-228	2.6	0.084	0.063	J	J	1464478.798	598460.131
SU2-159-060	02/13/2006	Thorium-230	2.8	0.147	0.043			1464478.798	598460.131
SU2-159-060	02/13/2006	Thorium-232	2.1	0.054	0.054	U	UJ	1464478.798	598460.131
SU2-159-061	02/13/2006	Plutonium-238	55	0.051	0.051	U	UJ	1464493.798	598460.131
SU2-159-061	02/13/2006	Plutonium-239/240	62	0.043	0.043	U	UJ	1464493.798	598460.131
SU2-159-061	02/13/2006	Thorium-228	2.6	0.070	0.064	J	J	1464493.798	598460.131
SU2-159-061	02/13/2006	Thorium-230	2.8	0.260	0.030			1464493.798	598460.131
SU2-159-061	02/13/2006	Thorium-232	2.1	0.044	0.044	U	UJ	1464493.798	598460.131
SU2-159-062	02/13/2006	Plutonium-238	55	0.034	0.034	U	UJ	1464508.798	598460.131
SU2-159-062	02/13/2006	Plutonium-239/240	62	0.031	0.031	U	UJ	1464508.798	598460.131
SU2-159-062	02/13/2006	Thorium-228	2.6	1.250	0.100			1464508.798	598460.131
SU2-159-062	02/13/2006	Thorium-230	2.8	0.900	0.040			1464508.798	598460.131
SU2-159-062	02/13/2006	Thorium-232	2.1	1.240	0.060			1464508.798	598460.131
SU2-159-063	02/13/2006	Plutonium-238	55	1.130	0.050			1464426.298	598473.122
SU2-159-063	02/13/2006	Plutonium-239/240	62	0.036	0.036	U	UJ	1464426.298	598473.122
SU2-159-063	02/13/2006	Thorium-228	2.6	0.460	0.080			1464426.298	598473.122
SU2-159-063	02/13/2006	Thorium-230	2.8	0.510	0.070			1464426.298	598473.122
SU2-159-063	02/13/2006	Thorium-232	2.1	0.520	0.040			1464426.298	598473.122
SU2-159-064	02/13/2006	Plutonium-238	55	10.900	0.020			1464441.298	598473.122
SU2-159-064	02/13/2006	Plutonium-239/240	62	0.145	0.024			1464441.298	598473.122
SU2-159-064	02/13/2006	Thorium-228	2.6	0.410	0.080			1464441.298	598473.122
SU2-159-064	02/13/2006	Thorium-230	2.8	0.550	0.050			1464441.298	598473.122

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-064	02/13/2006	Thorium-232	2.1	0.350	0.050			1464441.298	598473.122
SU2-159-065	02/13/2006	Plutonium-238	55	0.168	0.026			1464456.298	598473.122
SU2-159-065	02/13/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464456.298	598473.122
SU2-159-065	02/13/2006	Thorium-228	2.6	0.870	0.080			1464456.298	598473.122
SU2-159-065	02/13/2006	Thorium-230	2.8	1.200	0.040			1464456.298	598473.122
SU2-159-065	02/13/2006	Thorium-232	2.1	0.940	0.030			1464456.298	598473.122
SU2-159-066	02/13/2006	Plutonium-238	55	0.149	0.040			1464471.298	598473.122
SU2-159-066	02/13/2006	Plutonium-239/240	62	0.035	0.035	U	UJ	1464471.298	598473.122
SU2-159-066	02/13/2006	Thorium-228	2.6	0.100	0.061	J	J	1464471.298	598473.122
SU2-159-066	02/13/2006	Thorium-230	2.8	0.280	0.040			1464471.298	598473.122
SU2-159-066	02/13/2006	Thorium-232	2.1	0.048	0.048	U	U	1464471.298	598473.122
SU2-159-067	02/13/2006	Plutonium-238	55	5.620	0.030			1464486.298	598473.122
SU2-159-067	02/13/2006	Plutonium-239/240	62	0.074	0.021	J	J	1464486.298	598473.122
SU2-159-067	02/13/2006	Thorium-228	2.6	0.870	0.060			1464486.298	598473.122
SU2-159-067	02/13/2006	Thorium-230	2.8	0.930	0.050			1464486.298	598473.122
SU2-159-067	02/13/2006	Thorium-232	2.1	0.780	0.040			1464486.298	598473.122
SU2-159-068	02/13/2006	Plutonium-238	55	0.030	0.030	U	UJ	1464501.298	598473.122
SU2-159-068	02/13/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464501.298	598473.122
SU2-159-068	02/13/2006	Thorium-228	2.6	1.230	0.070			1464501.298	598473.122
SU2-159-068	02/13/2006	Thorium-230	2.8	0.940	0.050			1464501.298	598473.122
SU2-159-068	02/13/2006	Thorium-232	2.1	1.420	0.040			1464501.298	598473.122
SU2-159-069	02/13/2006	Plutonium-238	55	1.540	0.030			1464516.298	598473.122
SU2-159-069	02/13/2006	Plutonium-239/240	62	0.027	0.027	U	UJ	1464516.298	598473.122
SU2-159-069	02/13/2006	Thorium-228	2.6	1.150	0.060			1464516.298	598473.122
SU2-159-069	02/13/2006	Thorium-230	2.8	0.960	0.040			1464516.298	598473.122
SU2-159-069	02/13/2006	Thorium-232	2.1	1.020	0.030			1464516.298	598473.122
SU2-159-069D	02/13/2006	Plutonium-238	55	1.090	0.030			1464516.298	598473.122
SU2-159-069D	02/13/2006	Plutonium-239/240	62	0.030	0.026	J	J	1464516.298	598473.122
SU2-159-069D	02/13/2006	Thorium-228	2.6	1.140	0.060			1464516.298	598473.122
SU2-159-069D	02/13/2006	Thorium-230	2.8	1.040	0.040			1464516.298	598473.122
SU2-159-069D	02/13/2006	Thorium-232	2.1	1.130	0.040			1464516.298	598473.122
SU2-159-070	02/13/2006	Plutonium-238	55	1.180	0.020			1464418.798	598486.112
SU2-159-070	02/13/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464418.798	598486.112
SU2-159-070	02/13/2006	Thorium-228	2.6	0.850	0.070			1464418.798	598486.112
SU2-159-070	02/13/2006	Thorium-230	2.8	0.940	0.060			1464418.798	598486.112
SU2-159-070	02/13/2006	Thorium-232	2.1	0.660	0.060			1464418.798	598486.112
SU2-159-071	02/13/2006	Plutonium-238	55	0.810	0.030			1464433.798	598486.112
SU2-159-071	02/13/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464433.798	598486.112
SU2-159-071	02/13/2006	Thorium-228	2.6	0.260	0.060			1464433.798	598486.112
SU2-159-071	02/13/2006	Thorium-230	2.8	0.460	0.040			1464433.798	598486.112
SU2-159-071	02/13/2006	Thorium-232	2.1	0.260	0.030			1464433.798	598486.112
SU2-159-072	02/13/2006	Plutonium-238	55	4.290	0.040			1464448.798	598486.112
SU2-159-072	02/13/2006	Plutonium-239/240	62	0.048	0.014	J	J	1464448.798	598486.112
SU2-159-072	02/13/2006	Thorium-228	2.6	0.350	0.070			1464448.798	598486.112
SU2-159-072	02/13/2006	Thorium-230	2.8	0.750	0.060			1464448.798	598486.112
SU2-159-072	02/13/2006	Thorium-232	2.1	0.480	0.030			1464448.798	598486.112
SU2-159-073	02/11/2006	Plutonium-238	55	0.138	0.029			1464463.798	598486.112
SU2-159-073	02/11/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464463.798	598486.112
SU2-159-073	02/11/2006	Thorium-228	2.6	1.030	0.040			1464463.798	598486.112
SU2-159-073	02/11/2006	Thorium-230	2.8	0.850	0.050			1464463.798	598486.112
SU2-159-073	02/11/2006	Thorium-232	2.1	0.990	0.050			1464463.798	598486.112
SU2-159-076	02/11/2006	Plutonium-238	55	25.100	0.030			1464508.798	598486.112
SU2-159-076	02/11/2006	Plutonium-239/240	62	0.140	0.014			1464508.798	598486.112
SU2-159-076	02/11/2006	Thorium-228	2.6	1.310	0.060			1464508.798	598486.112
SU2-159-076	02/11/2006	Thorium-230	2.8	1.260	0.050			1464508.798	598486.112
SU2-159-076	02/11/2006	Thorium-232	2.1	1.040	0.050			1464508.798	598486.112
SU2-159-077	02/13/2006	Plutonium-238	55	0.248	0.024			1464426.298	598499.103
SU2-159-077	02/13/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464426.298	598499.103
SU2-159-077	02/13/2006	Thorium-228	2.6	1.200	0.070			1464426.298	598499.103
SU2-159-077	02/13/2006	Thorium-230	2.8	1.080	0.030			1464426.298	598499.103
SU2-159-077	02/13/2006	Thorium-232	2.1	1.090	0.030			1464426.298	598499.103

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-078	02/11/2006	Plutonium-238	55	0.058	0.032	J	J	1464441.298	598499.103
SU2-159-078	02/11/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464441.298	598499.103
SU2-159-078	02/11/2006	Thorium-228	2.6	1.140	0.040			1464441.298	598499.103
SU2-159-078	02/11/2006	Thorium-230	2.8	1.020	0.030			1464441.298	598499.103
SU2-159-078	02/11/2006	Thorium-232	2.1	1.170	0.050			1464441.298	598499.103
SU2-159-079	02/11/2006	Plutonium-238	55	14.600	0.020			1464456.298	598499.103
SU2-159-079	02/11/2006	Plutonium-239/240	62	0.118	0.020			1464456.298	598499.103
SU2-159-079	02/11/2006	Thorium-228	2.6	0.360	0.060			1464456.298	598499.103
SU2-159-079	02/11/2006	Thorium-230	2.8	0.510	0.040		J	1464456.298	598499.103
SU2-159-079	02/11/2006	Thorium-232	2.1	0.360	0.030			1464456.298	598499.103
SU2-159-080	02/11/2006	Plutonium-238	55	0.032	0.032	U	UJ	1464471.298	598499.103
SU2-159-080	02/11/2006	Plutonium-239/240	62	0.030	0.030	U	UJ	1464471.298	598499.103
SU2-159-080	02/11/2006	Thorium-228	2.6	0.960	0.080			1464471.298	598499.103
SU2-159-080	02/11/2006	Thorium-230	2.8	0.890	0.030			1464471.298	598499.103
SU2-159-080	02/11/2006	Thorium-232	2.1	1.000	0.040			1464471.298	598499.103
SU2-159-081	02/11/2006	Plutonium-238	55	0.046	0.030	J	J	1464486.298	598499.103
SU2-159-081	02/11/2006	Plutonium-239/240	62	0.013	0.013	U	UJ	1464486.298	598499.103
SU2-159-081	02/11/2006	Thorium-228	2.6	1.210	0.050			1464486.298	598499.103
SU2-159-081	02/11/2006	Thorium-230	2.8	0.930	0.050			1464486.298	598499.103
SU2-159-081	02/11/2006	Thorium-232	2.1	1.220	0.030			1464486.298	598499.103
SU2-159-082	02/11/2006	Plutonium-238	55	11.700	0.040			1464501.298	598499.103
SU2-159-082	02/11/2006	Plutonium-239/240	62	0.147	0.028			1464501.298	598499.103
SU2-159-082	02/11/2006	Thorium-228	2.6	1.380	0.070			1464501.298	598499.103
SU2-159-082	02/11/2006	Thorium-230	2.8	1.310	0.050			1464501.298	598499.103
SU2-159-082	02/11/2006	Thorium-232	2.1	1.220	0.030			1464501.298	598499.103
SU2-159-083	02/11/2006	Plutonium-238	55	0.410	0.040			1464516.298	598499.103
SU2-159-083	02/11/2006	Plutonium-239/240	62	0.037	0.037	U	UJ	1464516.298	598499.103
SU2-159-083	02/11/2006	Thorium-228	2.6	1.300	0.060			1464516.298	598499.103
SU2-159-083	02/11/2006	Thorium-230	2.8	1.140	0.050			1464516.298	598499.103
SU2-159-083	02/11/2006	Thorium-232	2.1	1.200	0.050			1464516.298	598499.103
SU2-159-084	02/13/2006	Plutonium-238	55	1.790	0.040			1464433.798	598512.093
SU2-159-084	02/13/2006	Plutonium-239/240	62	0.054	0.025	J	J	1464433.798	598512.093
SU2-159-084	02/13/2006	Thorium-228	2.6	1.090	0.050			1464433.798	598512.093
SU2-159-084	02/13/2006	Thorium-230	2.8	0.940	0.050			1464433.798	598512.093
SU2-159-084	02/13/2006	Thorium-232	2.1	1.290	0.030			1464433.798	598512.093
SU2-159-085	02/11/2006	Plutonium-238	55	2.720	0.040			1464448.798	598512.093
SU2-159-085	02/11/2006	Plutonium-239/240	62	0.023	0.020	J	J	1464448.798	598512.093
SU2-159-085	02/11/2006	Thorium-228	2.6	0.380	0.050			1464448.798	598512.093
SU2-159-085	02/11/2006	Thorium-230	2.8	0.790	0.040			1464448.798	598512.093
SU2-159-085	02/11/2006	Thorium-232	2.1	0.330	0.040			1464448.798	598512.093
SU2-159-086	02/11/2006	Plutonium-238	55	0.364	0.026			1464463.798	598512.093
SU2-159-086	02/11/2006	Plutonium-239/240	62	0.026	0.026	U	UJ	1464463.798	598512.093
SU2-159-086	02/11/2006	Thorium-228	2.6	0.940	0.110			1464463.798	598512.093
SU2-159-086	02/11/2006	Thorium-230	2.8	0.880	0.060			1464463.798	598512.093
SU2-159-086	02/11/2006	Thorium-232	2.1	1.060	0.050			1464463.798	598512.093
SU2-159-087	02/11/2006	Plutonium-238	55	0.049	0.031	J	J	1464478.798	598512.093
SU2-159-087	02/11/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464478.798	598512.093
SU2-159-087	02/11/2006	Thorium-228	2.6	1.210	0.100			1464478.798	598512.093
SU2-159-087	02/11/2006	Thorium-230	2.8	0.950	0.060			1464478.798	598512.093
SU2-159-087	02/11/2006	Thorium-232	2.1	1.180	0.060			1464478.798	598512.093
SU2-159-088	02/11/2006	Plutonium-238	55	1.920	0.040			1464493.798	598512.093
SU2-159-088	02/11/2006	Plutonium-239/240	62	0.035	0.022	J	J	1464493.798	598512.093
SU2-159-088	02/11/2006	Thorium-228	2.6	1.130	0.090			1464493.798	598512.093
SU2-159-088	02/11/2006	Thorium-230	2.8	0.930	0.070			1464493.798	598512.093
SU2-159-088	02/11/2006	Thorium-232	2.1	1.100	0.040			1464493.798	598512.093
SU2-159-089	02/11/2006	Plutonium-238	55	0.480	0.020			1464508.798	598512.093
SU2-159-089	02/11/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464508.798	598512.093
SU2-159-089	02/11/2006	Thorium-228	2.6	1.100	0.090			1464508.798	598512.093
SU2-159-089	02/11/2006	Thorium-230	2.8	0.830	0.070			1464508.798	598512.093
SU2-159-089	02/11/2006	Thorium-232	2.1	1.050	0.060			1464508.798	598512.093
SU2-159-089D	02/11/2006	Plutonium-238	55	0.720	0.040			1464508.798	598512.093

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-089D	02/11/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464508.798	598512.093
SU2-159-089D	02/11/2006	Thorium-228	2.6	1.240	0.090			1464508.798	598512.093
SU2-159-089D	02/11/2006	Thorium-230	2.8	0.910	0.050			1464508.798	598512.093
SU2-159-089D	02/11/2006	Thorium-232	2.1	1.090	0.050			1464508.798	598512.093
SU2-159-090	02/13/2006	Plutonium-238	55	26.400	0.060			1464426.298	598525.083
SU2-159-090	02/13/2006	Plutonium-239/240	62	0.100	0.039	J	J	1464426.298	598525.083
SU2-159-090	02/13/2006	Thorium-228	2.6	0.940	0.170		J	1464426.298	598525.083
SU2-159-090	02/13/2006	Thorium-230	2.8	0.680	0.140			1464426.298	598525.083
SU2-159-090	02/13/2006	Thorium-232	2.1	0.980	0.110		J	1464426.298	598525.083
SU2-159-091	02/13/2006	Plutonium-238	55	2.360	0.030			1464441.298	598525.083
SU2-159-091	02/13/2006	Plutonium-239/240	62	0.059	0.025	J	J	1464441.298	598525.083
SU2-159-091	02/13/2006	Thorium-228	2.6	0.295	0.037			1464441.298	598525.083
SU2-159-091	02/13/2006	Thorium-230	2.8	0.550	0.030			1464441.298	598525.083
SU2-159-091	02/13/2006	Thorium-232	2.1	0.350	0.020			1464441.298	598525.083
SU2-159-092	02/10/2006	Plutonium-238	55	0.061	0.029	J	J	1464456.298	598525.083
SU2-159-092	02/10/2006	Plutonium-239/240	62	0.014	0.014	U	UJ	1464456.298	598525.083
SU2-159-092	02/10/2006	Thorium-228	2.6	0.960	0.080			1464456.298	598525.083
SU2-159-092	02/10/2006	Thorium-230	2.8	0.670	0.050			1464456.298	598525.083
SU2-159-092	02/10/2006	Thorium-232	2.1	1.070	0.040			1464456.298	598525.083
SU2-159-093	02/10/2006	Plutonium-238	55	3.700	0.080			1464471.298	598525.083
SU2-159-093	02/10/2006	Plutonium-239/240	62	0.053	0.053	U	UJ	1464471.298	598525.083
SU2-159-093	02/10/2006	Thorium-228	2.6	0.790	0.190		J	1464471.298	598525.083
SU2-159-093	02/10/2006	Thorium-230	2.8	0.960	0.140			1464471.298	598525.083
SU2-159-093	02/10/2006	Thorium-232	2.1	1.220	0.110		J	1464471.298	598525.083
SU2-159-094	02/10/2006	Plutonium-238	55	1.820	0.030		J	1464486.298	598525.083
SU2-159-094	02/10/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464486.298	598525.083
SU2-159-094	02/10/2006	Thorium-228	2.6	0.860	0.250		J	1464486.298	598525.083
SU2-159-094	02/10/2006	Thorium-230	2.8	0.670	0.200		J	1464486.298	598525.083
SU2-159-094	02/10/2006	Thorium-232	2.1	0.960	0.200		J	1464486.298	598525.083
SU2-159-095	02/11/2006	Plutonium-238	55	1.190	0.030			1464501.298	598525.083
SU2-159-095	02/11/2006	Plutonium-239/240	62	0.030	0.030	U	UJ	1464501.298	598525.083
SU2-159-095	02/11/2006	Thorium-228	2.6	1.140	0.070			1464501.298	598525.083
SU2-159-095	02/11/2006	Thorium-230	2.8	1.030	0.030			1464501.298	598525.083
SU2-159-095	02/11/2006	Thorium-232	2.1	1.290	0.050			1464501.298	598525.083
SU2-159-096	02/11/2006	Plutonium-238	55	0.680	0.030			1464516.298	598525.083
SU2-159-096	02/11/2006	Plutonium-239/240	62	0.029	0.013	J	J	1464516.298	598525.083
SU2-159-096	02/11/2006	Thorium-228	2.6	0.960	0.070			1464516.298	598525.083
SU2-159-096	02/11/2006	Thorium-230	2.8	0.900	0.050			1464516.298	598525.083
SU2-159-096	02/11/2006	Thorium-232	2.1	1.150	0.020			1464516.298	598525.083
SU2-159-097	02/10/2006	Plutonium-238	55	7.800	0.030			1464448.798	598538.074
SU2-159-097	02/10/2006	Plutonium-239/240	62	0.099	0.026	J	J	1464448.798	598538.074
SU2-159-097	02/10/2006	Thorium-228	2.6	1.020	0.090			1464448.798	598538.074
SU2-159-097	02/10/2006	Thorium-230	2.8	0.990	0.060			1464448.798	598538.074
SU2-159-097	02/10/2006	Thorium-232	2.1	0.920	0.050			1464448.798	598538.074
SU2-159-098	02/10/2006	Plutonium-238	55	6.010	0.060			1464463.798	598538.074
SU2-159-098	02/10/2006	Plutonium-239/240	62	0.055	0.048	J	J	1464463.798	598538.074
SU2-159-098	02/10/2006	Thorium-228	2.6	0.970	0.070		J	1464463.798	598538.074
SU2-159-098	02/10/2006	Thorium-230	2.8	1.410	0.050			1464463.798	598538.074
SU2-159-098	02/10/2006	Thorium-232	2.1	0.860	0.030		J	1464463.798	598538.074
SU2-159-099	02/14/2006	Plutonium-238	55	3.910	0.040			1464478.798	598538.074
SU2-159-099	02/14/2006	Plutonium-239/240	62	0.046	0.035	J	J	1464478.798	598538.074
SU2-159-099	02/14/2006	Thorium-228	2.6	1.480	0.080			1464478.798	598538.074
SU2-159-099	02/14/2006	Thorium-230	2.8	1.170	0.070		J	1464478.798	598538.074
SU2-159-099	02/14/2006	Thorium-232	2.1	1.520	0.070			1464478.798	598538.074
SU2-159-100	02/14/2006	Plutonium-238	55	5.000	0.040			1464493.798	598538.074
SU2-159-100	02/14/2006	Plutonium-239/240	62	0.070	0.022	J	J	1464493.798	598538.074
SU2-159-100	02/14/2006	Thorium-228	2.6	1.280	0.070			1464493.798	598538.074
SU2-159-100	02/14/2006	Thorium-230	2.8	1.140	0.040			1464493.798	598538.074
SU2-159-100	02/14/2006	Thorium-232	2.1	1.370	0.060			1464493.798	598538.074
SU2-159-101	02/14/2006	Plutonium-238	55	0.380	0.050			1464508.798	598538.074
SU2-159-101	02/14/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464508.798	598538.074

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-101	02/14/2006	Thorium-228	2.6	1.520	0.060			1464508.798	598538.074
SU2-159-101	02/14/2006	Thorium-230	2.8	1.160	0.060			1464508.798	598538.074
SU2-159-101	02/14/2006	Thorium-232	2.1	0.960	0.040			1464508.798	598538.074
SU2-159-102	02/14/2006	Plutonium-238	55	48.000	0.060			1464456.298	598551.064
SU2-159-102	02/14/2006	Plutonium-239/240	62	0.340	0.040			1464456.298	598551.064
SU2-159-102	02/14/2006	Thorium-228	2.6	1.490	0.150		J	1464456.298	598551.064
SU2-159-102	02/14/2006	Thorium-230	2.8	0.670	0.110			1464456.298	598551.064
SU2-159-102	02/14/2006	Thorium-232	2.1	0.930	0.090		J	1464456.298	598551.064
SU2-159-103	02/14/2006	Plutonium-238	55	2.200	0.030			1464471.298	598551.064
SU2-159-103	02/14/2006	Plutonium-239/240	62	0.060	0.023	J	J	1464471.298	598551.064
SU2-159-103	02/14/2006	Thorium-228	2.6	0.780	0.030			1464471.298	598551.064
SU2-159-103	02/14/2006	Thorium-230	2.8	1.490	0.020			1464471.298	598551.064
SU2-159-103	02/14/2006	Thorium-232	2.1	0.740	0.030			1464471.298	598551.064
SU2-159-103D	02/14/2006	Plutonium-238	55	1.600	0.050			1464471.298	598551.064
SU2-159-103D	02/14/2006	Plutonium-239/240	62	0.042	0.041	J	J	1464471.298	598551.064
SU2-159-103D	02/14/2006	Thorium-228	2.6	0.710	0.030			1464471.298	598551.064
SU2-159-103D	02/14/2006	Thorium-230	2.8	1.230	0.020			1464471.298	598551.064
SU2-159-103D	02/14/2006	Thorium-232	2.1	0.750	0.010			1464471.298	598551.064
SU2-159-318	02/13/2006	Plutonium-238	55	7.720	0.040			1464443.670	598417.226
SU2-159-318	02/13/2006	Plutonium-239/240	62	0.115	0.033			1464443.670	598417.226
SU2-159-318	02/13/2006	Thorium-228	2.6	0.310	0.050			1464443.670	598417.226
SU2-159-318	02/13/2006	Thorium-230	2.8	0.960	0.020			1464443.670	598417.226
SU2-159-318	02/13/2006	Thorium-232	2.1	0.304	0.028			1464443.670	598417.226
SU2-159-319	02/13/2006	Plutonium-238	55	0.710	0.030			1464455.410	598402.423
SU2-159-319	02/13/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464455.410	598402.423
SU2-159-319	02/13/2006	Thorium-228	2.6	0.210	0.035			1464455.410	598402.423
SU2-159-319	02/13/2006	Thorium-230	2.8	0.540	0.040			1464455.410	598402.423
SU2-159-319	02/13/2006	Thorium-232	2.1	0.219	0.024			1464455.410	598402.423
SU2-159-320	02/14/2006	Plutonium-238	55	27.600	0.030			1464469.703	598400.892
SU2-159-320	02/14/2006	Plutonium-239/240	62	0.216	0.029			1464469.703	598400.892
SU2-159-320	02/14/2006	Thorium-228	2.6	0.650	0.120			1464469.703	598400.892
SU2-159-320	02/14/2006	Thorium-230	2.8	0.650	0.060			1464469.703	598400.892
SU2-159-320	02/14/2006	Thorium-232	2.1	0.620	0.080			1464469.703	598400.892
SU2-159-321	02/13/2006	Plutonium-238	55	0.277	0.028		J	1464440.608	598405.486
SU2-159-321	02/13/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464440.608	598405.486
SU2-159-321	02/13/2006	Thorium-228	2.6	0.830	0.040			1464440.608	598405.486
SU2-159-321	02/13/2006	Thorium-230	2.8	1.230	0.020			1464440.608	598405.486
SU2-159-321	02/13/2006	Thorium-232	2.1	0.850	0.030			1464440.608	598405.486
SU2-159-321D	02/13/2006	Plutonium-238	55	0.630	0.030		J	1464440.608	598405.486
SU2-159-321D	02/13/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464440.608	598405.486
SU2-159-321D	02/13/2006	Thorium-228	2.6	0.900	0.040			1464440.608	598405.486
SU2-159-321D	02/13/2006	Thorium-230	2.8	1.270	0.030			1464440.608	598405.486
SU2-159-321D	02/13/2006	Thorium-232	2.1	0.900	0.020			1464440.608	598405.486
SU2-159-322	02/14/2006	Plutonium-238	55	0.430	0.030			1464353.164	598362.441
SU2-159-322	02/14/2006	Plutonium-239/240	62	0.029	0.022	J	J	1464353.164	598362.441
SU2-159-322	02/14/2006	Thorium-228	2.6	1.180	0.090			1464353.164	598362.441
SU2-159-322	02/14/2006	Thorium-230	2.8	0.800	0.030			1464353.164	598362.441
SU2-159-322	02/14/2006	Thorium-232	2.1	1.050	0.050			1464353.164	598362.441
SU2-159-323	02/14/2006	Plutonium-238	55	18.800	0.020			1464362.100	598366.518
SU2-159-323	02/14/2006	Plutonium-239/240	62	0.107	0.021			1464362.100	598366.518
SU2-159-323	02/14/2006	Thorium-228	2.6	0.190	0.060			1464362.100	598366.518
SU2-159-323	02/14/2006	Thorium-230	2.8	0.248	0.045			1464362.100	598366.518
SU2-159-323	02/14/2006	Thorium-232	2.1	0.139	0.041			1464362.100	598366.518
SU2-159-324	02/13/2006	Plutonium-238	55	0.348	0.035			1464473.566	598359.776
SU2-159-324	02/13/2006	Plutonium-239/240	62	0.031	0.031	U	UJ	1464473.566	598359.776
SU2-159-324	02/13/2006	Thorium-228	2.6	0.570	0.050			1464473.566	598359.776
SU2-159-324	02/13/2006	Thorium-230	2.8	1.100	0.030			1464473.566	598359.776
SU2-159-324	02/13/2006	Thorium-232	2.1	0.510	0.040			1464473.566	598359.776
SU2-159-327 (former	02/14/2006	Plutonium-238	55	1.430	0.030			1464728.895	598389.683
SU2-159-327 (former	02/14/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464728.895	598389.683
SU2-159-327 (former	02/14/2006	Thorium-228	2.6	1.150	0.080			1464728.895	598389.683

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU2-159-327 (former	02/14/2006	Thorium-230	2.8	0.790	0.060			1464728.895	598389.683
SU2-159-327 (former	02/14/2006	Thorium-232	2.1	1.040	0.040			1464728.895	598389.683
SU3-159-104	02/10/2006	Plutonium-238	55	0.105	0.029			1464585.650	598375.527
SU3-159-104	02/10/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464585.650	598375.527
SU3-159-104	02/10/2006	Thorium-228	2.6	0.940	0.130			1464585.650	598375.527
SU3-159-104	02/10/2006	Thorium-230	2.8	0.680	0.080			1464585.650	598375.527
SU3-159-104	02/10/2006	Thorium-232	2.1	0.870	0.100			1464585.650	598375.527
SU3-159-105	02/10/2006	Plutonium-238	55	0.560	0.060			1464600.650	598375.527
SU3-159-105	02/10/2006	Plutonium-239/240	62	0.053	0.053	U	UJ	1464600.650	598375.527
SU3-159-105	02/10/2006	Thorium-228	2.6	1.310	0.140		J	1464600.650	598375.527
SU3-159-105	02/10/2006	Thorium-230	2.8	0.720	0.110			1464600.650	598375.527
SU3-159-105	02/10/2006	Thorium-232	2.1	1.210	0.110		J	1464600.650	598375.527
SU3-159-106	02/10/2006	Plutonium-238	55	0.690	0.030			1464615.650	598375.527
SU3-159-106	02/10/2006	Plutonium-239/240	62	0.026	0.026	U	UJ	1464615.650	598375.527
SU3-159-106	02/10/2006	Thorium-228	2.6	0.740	0.060			1464615.650	598375.527
SU3-159-106	02/10/2006	Thorium-230	2.8	0.560	0.040			1464615.650	598375.527
SU3-159-106	02/10/2006	Thorium-232	2.1	0.650	0.030			1464615.650	598375.527
SU3-159-107	02/10/2006	Plutonium-238	55	0.030	0.028	J	J	1464630.650	598375.527
SU3-159-107	02/10/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464630.650	598375.527
SU3-159-107	02/10/2006	Thorium-228	2.6	1.090	0.090			1464630.650	598375.527
SU3-159-107	02/10/2006	Thorium-230	2.8	0.830	0.030			1464630.650	598375.527
SU3-159-107	02/10/2006	Thorium-232	2.1	0.990	0.050			1464630.650	598375.527
SU3-159-108	02/10/2006	Plutonium-238	55	0.114	0.054			1464533.150	598388.517
SU3-159-108	02/10/2006	Plutonium-239/240	62	0.050	0.050	U	UJ	1464533.150	598388.517
SU3-159-108	02/10/2006	Thorium-228	2.6	1.090	0.050			1464533.150	598388.517
SU3-159-108	02/10/2006	Thorium-230	2.8	0.950	0.040			1464533.150	598388.517
SU3-159-108	02/10/2006	Thorium-232	2.1	1.150	0.040			1464533.150	598388.517
SU3-159-108D	02/10/2006	Plutonium-238	55	0.062	0.062	U	UJ	1464533.150	598388.517
SU3-159-108D	02/10/2006	Plutonium-239/240	62	0.041	0.041	U	UJ	1464533.150	598388.517
SU3-159-108D	02/10/2006	Thorium-228	2.6	1.370	0.050			1464533.150	598388.517
SU3-159-108D	02/10/2006	Thorium-230	2.8	1.230	0.040			1464533.150	598388.517
SU3-159-108D	02/10/2006	Thorium-232	2.1	1.120	0.030			1464533.150	598388.517
SU3-159-109	02/10/2006	Plutonium-238	55	0.480	0.080			1464548.150	598388.517
SU3-159-109	02/10/2006	Plutonium-239/240	62	0.052	0.052	U	UJ	1464548.150	598388.517
SU3-159-109	02/10/2006	Thorium-228	2.6	1.420	0.070			1464548.150	598388.517
SU3-159-109	02/10/2006	Thorium-230	2.8	0.820	0.050			1464548.150	598388.517
SU3-159-109	02/10/2006	Thorium-232	2.1	0.980	0.040			1464548.150	598388.517
SU3-159-110	02/10/2006	Plutonium-238	55	1.270	0.060			1464563.150	598388.517
SU3-159-110	02/10/2006	Plutonium-239/240	62	0.048	0.048	U	UJ	1464563.150	598388.517
SU3-159-110	02/10/2006	Thorium-228	2.6	1.180	0.060			1464563.150	598388.517
SU3-159-110	02/10/2006	Thorium-230	2.8	0.970	0.040			1464563.150	598388.517
SU3-159-110	02/10/2006	Thorium-232	2.1	1.280	0.020			1464563.150	598388.517
SU3-159-111	02/10/2006	Plutonium-238	55	0.500	0.060			1464578.150	598388.517
SU3-159-111	02/10/2006	Plutonium-239/240	62	0.045	0.045	U	UJ	1464578.150	598388.517
SU3-159-111	02/10/2006	Thorium-228	2.6	1.010	0.070			1464578.150	598388.517
SU3-159-111	02/10/2006	Thorium-230	2.8	0.970	0.050			1464578.150	598388.517
SU3-159-111	02/10/2006	Thorium-232	2.1	1.180	0.040			1464578.150	598388.517
SU3-159-112	02/10/2006	Plutonium-238	55	0.220	0.060			1464593.150	598388.517
SU3-159-112	02/10/2006	Plutonium-239/240	62	0.048	0.048	U	UJ	1464593.150	598388.517
SU3-159-112	02/10/2006	Thorium-228	2.6	1.000	0.160		J	1464593.150	598388.517
SU3-159-112	02/10/2006	Thorium-230	2.8	0.580	0.110			1464593.150	598388.517
SU3-159-112	02/10/2006	Thorium-232	2.1	0.940	0.070		J	1464593.150	598388.517
SU3-159-113	02/10/2006	Plutonium-238	55	1.250	0.070			1464608.150	598388.517
SU3-159-113	02/10/2006	Plutonium-239/240	62	0.058	0.058	U	UJ	1464608.150	598388.517
SU3-159-113	02/10/2006	Thorium-228	2.6	1.200	0.060			1464608.150	598388.517
SU3-159-113	02/10/2006	Thorium-230	2.8	0.930	0.050			1464608.150	598388.517
SU3-159-113	02/10/2006	Thorium-232	2.1	1.170	0.050			1464608.150	598388.517
SU3-159-114	02/10/2006	Plutonium-238	55	0.640	0.050			1464623.150	598388.517
SU3-159-114	02/10/2006	Plutonium-239/240	62	0.039	0.039	U	UJ	1464623.150	598388.517
SU3-159-114	02/10/2006	Thorium-228	2.6	1.130	0.110		J	1464623.150	598388.517
SU3-159-114	02/10/2006	Thorium-230	2.8	0.920	0.090			1464623.150	598388.517

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU3-159-114	02/10/2006	Thorium-232	2.1	1.310	0.080		J	1464623.150	598388.517
SU3-159-115	02/10/2006	Plutonium-238	55	0.056	0.056	U	UJ	1464525.650	598401.507
SU3-159-115	02/10/2006	Plutonium-239/240	62	0.045	0.045	U	UJ	1464525.650	598401.507
SU3-159-115	02/10/2006	Thorium-228	2.6	1.040	0.050			1464525.650	598401.507
SU3-159-115	02/10/2006	Thorium-230	2.8	0.880	0.040			1464525.650	598401.507
SU3-159-115	02/10/2006	Thorium-232	2.1	0.990	0.020			1464525.650	598401.507
SU3-159-116	02/10/2006	Plutonium-238	55	0.064	0.064	U	UJ	1464540.650	598401.507
SU3-159-116	02/10/2006	Plutonium-239/240	62	0.047	0.047	U	UJ	1464540.650	598401.507
SU3-159-116	02/10/2006	Thorium-228	2.6	0.730	0.060			1464540.650	598401.507
SU3-159-116	02/10/2006	Thorium-230	2.8	0.820	0.050			1464540.650	598401.507
SU3-159-116	02/10/2006	Thorium-232	2.1	0.790	0.040			1464540.650	598401.507
SU3-159-117	02/10/2006	Plutonium-238	55	0.109	0.051			1464555.650	598401.507
SU3-159-117	02/10/2006	Plutonium-239/240	62	0.041	0.041	U	UJ	1464555.650	598401.507
SU3-159-117	02/10/2006	Thorium-228	2.6	1.090	0.040			1464555.650	598401.507
SU3-159-117	02/10/2006	Thorium-230	2.8	0.790	0.040			1464555.650	598401.507
SU3-159-117	02/10/2006	Thorium-232	2.1	1.310	0.040			1464555.650	598401.507
SU3-159-118	02/10/2006	Plutonium-238	55	0.157	0.055			1464570.650	598401.507
SU3-159-118	02/10/2006	Plutonium-239/240	62	0.043	0.043	U	UJ	1464570.650	598401.507
SU3-159-118	02/10/2006	Thorium-228	2.6	1.210	0.050			1464570.650	598401.507
SU3-159-118	02/10/2006	Thorium-230	2.8	0.830	0.040			1464570.650	598401.507
SU3-159-118	02/10/2006	Thorium-232	2.1	1.360	0.040			1464570.650	598401.507
SU3-159-119	02/10/2006	Plutonium-238	55	0.109	0.065			1464585.650	598401.507
SU3-159-119	02/10/2006	Plutonium-239/240	62	0.043	0.043	U	UJ	1464585.650	598401.507
SU3-159-119	02/10/2006	Thorium-228	2.6	1.170	0.060			1464585.650	598401.507
SU3-159-119	02/10/2006	Thorium-230	2.8	0.680	0.020			1464585.650	598401.507
SU3-159-119	02/10/2006	Thorium-232	2.1	1.360	0.020			1464585.650	598401.507
SU3-159-120	02/10/2006	Plutonium-238	55	2.210	0.060			1464600.650	598401.507
SU3-159-120	02/10/2006	Plutonium-239/240	62	0.053	0.053	U	UJ	1464600.650	598401.507
SU3-159-120	02/10/2006	Thorium-228	2.6	1.210	0.030			1464600.650	598401.507
SU3-159-120	02/10/2006	Thorium-230	2.8	0.890	0.030			1464600.650	598401.507
SU3-159-120	02/10/2006	Thorium-232	2.1	1.050	0.020			1464600.650	598401.507
SU3-159-121	02/10/2006	Plutonium-238	55	0.800	0.060			1464615.650	598401.507
SU3-159-121	02/10/2006	Plutonium-239/240	62	0.051	0.051	U	UJ	1464615.650	598401.507
SU3-159-121	02/10/2006	Thorium-228	2.6	1.150	0.040			1464615.650	598401.507
SU3-159-121	02/10/2006	Thorium-230	2.8	1.070	0.020			1464615.650	598401.507
SU3-159-121	02/10/2006	Thorium-232	2.1	0.940	0.040			1464615.650	598401.507
SU3-159-122	**02/10/2006**	**Plutonium-238**	**55**	**87.000**	**0.050**			**1464630.650**	**598401.507**
SU3-159-122	02/10/2006	Plutonium-239/240	62	0.810	0.050			1464630.650	598401.507
SU3-159-122	02/10/2006	Thorium-228	2.6	1.340	0.050			1464630.650	598401.507
SU3-159-122	02/10/2006	Thorium-230	2.8	0.910	0.030			1464630.650	598401.507
SU3-159-122	02/10/2006	Thorium-232	2.1	1.070	0.020			1464630.650	598401.507
SU3-159-123	02/10/2006	Plutonium-238	55	0.054	0.054	U	UJ	1464533.150	598414.498
SU3-159-123	02/10/2006	Plutonium-239/240	62	0.040	0.040	U	UJ	1464533.150	598414.498
SU3-159-123	02/10/2006	Thorium-228	2.6	1.040	0.110			1464533.150	598414.498
SU3-159-123	02/10/2006	Thorium-230	2.8	0.870	0.040			1464533.150	598414.498
SU3-159-123	02/10/2006	Thorium-232	2.1	1.170	0.060			1464533.150	598414.498
SU3-159-124	02/10/2006	Plutonium-238	55	0.084	0.084	U	UJ	1464548.150	598414.498
SU3-159-124	02/10/2006	Plutonium-239/240	62	0.044	0.044	U	UJ	1464548.150	598414.498
SU3-159-124	02/10/2006	Thorium-228	2.6	1.430	0.070			1464548.150	598414.498
SU3-159-124	02/10/2006	Thorium-230	2.8	0.890	0.070			1464548.150	598414.498
SU3-159-124	02/10/2006	Thorium-232	2.1	1.160	0.040			1464548.150	598414.498
SU3-159-125	02/10/2006	Plutonium-238	55	3.030	0.050			1464563.150	598414.498
SU3-159-125	02/10/2006	Plutonium-239/240	62	0.047	0.047	U	UJ	1464563.150	598414.498
SU3-159-125	02/10/2006	Thorium-228	2.6	1.290	0.090			1464563.150	598414.498
SU3-159-125	02/10/2006	Thorium-230	2.8	0.990	0.060			1464563.150	598414.498
SU3-159-125	02/10/2006	Thorium-232	2.1	0.960	0.030			1464563.150	598414.498
SU3-159-126	02/10/2006	Plutonium-238	55	0.119	0.079			1464578.150	598414.498
SU3-159-126	02/10/2006	Plutonium-239/240	62	0.040	0.040	U	UJ	1464578.150	598414.498
SU3-159-126	02/10/2006	Thorium-228	2.6	1.250	0.080			1464578.150	598414.498
SU3-159-126	02/10/2006	Thorium-230	2.8	0.710	0.070			1464578.150	598414.498
SU3-159-126	02/10/2006	Thorium-232	2.1	1.090	0.080			1464578.150	598414.498

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU3-159-127	02/10/2006	Plutonium-238	55	0.910	0.060			1464593.150	598414.498
SU3-159-127	02/10/2006	Plutonium-239/240	62	0.051	0.051	U	UJ	1464593.150	598414.498
SU3-159-127	02/10/2006	Thorium-228	2.6	1.250	0.040			1464593.150	598414.498
SU3-159-127	02/10/2006	Thorium-230	2.8	0.900	0.030			1464593.150	598414.498
SU3-159-127	02/10/2006	Thorium-232	2.1	1.140	0.020			1464593.150	598414.498
SU3-159-128	03/28/2006	Plutonium-238	55	8.200	0.090			1464608.150	598414.498
SU3-159-128	03/28/2006	Plutonium-239/240	62	0.052	0.045	J	J	1464608.150	598414.498
SU3-159-128	03/28/2006	Thorium-228	2.6	0.970	0.070			1464608.150	598414.498
SU3-159-128	03/28/2006	Thorium-230	2.8	0.830	0.030			1464608.150	598414.498
SU3-159-128	03/28/2006	Thorium-232	2.1	1.050	0.030			1464608.150	598414.498
SU3-159-129	03/01/2006	Plutonium-238	55	42.000	0.080			1464623.150	598414.498
SU3-159-129	03/01/2006	Plutonium-239/240	62	0.176	0.019	J	J	1464623.150	598414.498
SU3-159-129	03/01/2006	Thorium-228	2.6	1.330	0.130			1464623.150	598414.498
SU3-159-129	03/01/2006	Thorium-230	2.8	0.790	0.090			1464623.150	598414.498
SU3-159-129	03/01/2006	Thorium-232	2.1	1.110	0.060			1464623.150	598414.498
SU3-159-130	02/10/2006	Plutonium-238	55	0.026	0.026	U	UJ	1464525.650	598427.488
SU3-159-130	02/10/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464525.650	598427.488
SU3-159-130	02/10/2006	Thorium-228	2.6	1.310	0.030			1464525.650	598427.488
SU3-159-130	02/10/2006	Thorium-230	2.8	0.920	0.050			1464525.650	598427.488
SU3-159-130	02/10/2006	Thorium-232	2.1	1.130	0.050			1464525.650	598427.488
SU3-159-131	02/10/2006	Plutonium-238	55	2.940	0.040			1464540.650	598427.488
SU3-159-131	02/10/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464540.650	598427.488
SU3-159-131	02/10/2006	Thorium-228	2.6	1.310	0.150			1464540.650	598427.488
SU3-159-131	02/10/2006	Thorium-230	2.8	1.170	0.070			1464540.650	598427.488
SU3-159-131	02/10/2006	Thorium-232	2.1	1.590	0.100			1464540.650	598427.488
SU3-159-132	02/10/2006	Plutonium-238	55	0.035	0.035	U	UJ	1464555.650	598427.488
SU3-159-132	02/10/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464555.650	598427.488
SU3-159-132	02/10/2006	Thorium-228	2.6	1.500	0.160			1464555.650	598427.488
SU3-159-132	02/10/2006	Thorium-230	2.8	1.100	0.130			1464555.650	598427.488
SU3-159-132	02/10/2006	Thorium-232	2.1	1.300	0.070			1464555.650	598427.488
SU3-159-133	02/10/2006	Plutonium-238	55	0.316	0.035			1464570.650	598427.488
SU3-159-133	02/10/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464570.650	598427.488
SU3-159-133	02/10/2006	Thorium-228	2.6	1.340	0.100			1464570.650	598427.488
SU3-159-133	02/10/2006	Thorium-230	2.8	0.850	0.060			1464570.650	598427.488
SU3-159-133	02/10/2006	Thorium-232	2.1	1.450	0.060			1464570.650	598427.488
SU3-159-134	02/10/2006	Plutonium-238	55	0.274	0.033			1464585.650	598427.488
SU3-159-134	02/10/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464585.650	598427.488
SU3-159-134	02/10/2006	Thorium-228	2.6	0.690	0.050			1464585.650	598427.488
SU3-159-134	02/10/2006	Thorium-230	2.8	0.520	0.030			1464585.650	598427.488
SU3-159-134	02/10/2006	Thorium-232	2.1	0.640	0.020			1464585.650	598427.488
SU3-159-135	02/10/2006	Plutonium-238	55	15.800	0.050			1464600.650	598427.488
SU3-159-135	02/10/2006	Plutonium-239/240	62	0.090	0.043	J	J	1464600.650	598427.488
SU3-159-135	02/10/2006	Thorium-228	2.6	1.290	0.110		J	1464600.650	598427.488
SU3-159-135	02/10/2006	Thorium-230	2.8	0.950	0.130			1464600.650	598427.488
SU3-159-135	02/10/2006	Thorium-232	2.1	1.270	0.130		J	1464600.650	598427.488
SU3-159-136	03/28/2006	Plutonium-238	55	25.200	0.080			1464615.650	598427.488
SU3-159-136	03/28/2006	Plutonium-239/240	62	0.197	0.061	J	J	1464615.650	598427.488
SU3-159-136	03/28/2006	Thorium-228	2.6	0.950	0.080			1464615.650	598427.488
SU3-159-136	03/28/2006	Thorium-230	2.8	1.140	0.060			1464615.650	598427.488
SU3-159-136	03/28/2006	Thorium-232	2.1	1.320	0.050			1464615.650	598427.488
SU3-159-137	**03/28/2006**	**Plutonium-238**	**55**	**149.000**	**0.100**			**1464630.650**	**598427.488**
SU3-159-137	03/28/2006	Plutonium-239/240	62	0.680	0.080			1464630.650	598427.488
SU3-159-137	03/28/2006	Thorium-228	2.6	1.310	0.050			1464630.650	598427.488
SU3-159-137	03/28/2006	Thorium-230	2.8	1.350	0.080			1464630.650	598427.488
SU3-159-137	03/28/2006	Thorium-232	2.1	1.110	0.060			1464630.650	598427.488
SU3-159-138	02/10/2006	Plutonium-238	55	10.000	0.030			1464533.150	598440.479
SU3-159-138	02/10/2006	Plutonium-239/240	62	0.030	0.029	J	J	1464533.150	598440.479
SU3-159-138	02/10/2006	Thorium-228	2.6	1.140	0.130			1464533.150	598440.479
SU3-159-138	02/10/2006	Thorium-230	2.8	0.990	0.100			1464533.150	598440.479
SU3-159-138	02/10/2006	Thorium-232	2.1	1.060	0.050			1464533.150	598440.479
SU3-159-139	02/10/2006	Plutonium-238	55	0.050	0.050	U	UJ	1464548.150	598440.479

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU3-159-139	02/10/2006	Plutonium-239/240	62	0.042	0.042	U	UJ	1464548.150	598440.479
SU3-159-139	02/10/2006	Thorium-228	2.6	1.400	0.100			1464548.150	598440.479
SU3-159-139	02/10/2006	Thorium-230	2.8	0.820	0.070			1464548.150	598440.479
SU3-159-139	02/10/2006	Thorium-232	2.1	1.170	0.060			1464548.150	598440.479
SU3-159-140	02/10/2006	Plutonium-238	55	1.510	0.030			1464563.150	598440.479
SU3-159-140	02/10/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464563.150	598440.479
SU3-159-140	02/10/2006	Thorium-228	2.6	1.310	0.070			1464563.150	598440.479
SU3-159-140	02/10/2006	Thorium-230	2.8	0.820	0.040			1464563.150	598440.479
SU3-159-140	02/10/2006	Thorium-232	2.1	1.140	0.060			1464563.150	598440.479
SU3-159-141	02/10/2006	Plutonium-238	55	0.405	0.038			1464578.150	598440.479
SU3-159-141	02/10/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464578.150	598440.479
SU3-159-141	02/10/2006	Thorium-228	2.6	1.110	0.090			1464578.150	598440.479
SU3-159-141	02/10/2006	Thorium-230	2.8	0.960	0.030			1464578.150	598440.479
SU3-159-141	02/10/2006	Thorium-232	2.1	1.510	0.060			1464578.150	598440.479
SU3-159-142	02/10/2006	Plutonium-238	55	5.230	0.030			1464593.150	598440.479
SU3-159-142	02/10/2006	Plutonium-239/240	62	0.018	0.017	J	J	1464593.150	598440.479
SU3-159-142	02/10/2006	Thorium-228	2.6	1.260	0.080			1464593.150	598440.479
SU3-159-142	02/10/2006	Thorium-230	2.8	0.810	0.050			1464593.150	598440.479
SU3-159-142	02/10/2006	Thorium-232	2.1	1.150	0.030			1464593.150	598440.479
SU3-159-143	02/10/2006	Plutonium-238	55	17.600	0.040			1464608.150	598440.479
SU3-159-143	02/10/2006	Plutonium-239/240	62	0.052	0.020	J	J	1464608.150	598440.479
SU3-159-143	02/10/2006	Thorium-228	2.6	1.470	0.060			1464608.150	598440.479
SU3-159-143	02/10/2006	Thorium-230	2.8	1.190	0.050			1464608.150	598440.479
SU3-159-143	02/10/2006	Thorium-232	2.1	1.390	0.050			1464608.150	598440.479
SU3-159-144	02/10/2006	Plutonium-238	55	0.740	0.030			1464623.150	598440.479
SU3-159-144	02/10/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464623.150	598440.479
SU3-159-144	02/10/2006	Thorium-228	2.6	1.190	0.070			1464623.150	598440.479
SU3-159-144	02/10/2006	Thorium-230	2.8	1.000	0.050			1464623.150	598440.479
SU3-159-144	02/10/2006	Thorium-232	2.1	1.130	0.050			1464623.150	598440.479
SU3-159-145	02/10/2006	Plutonium-238	55	8.920	0.040			1464525.650	598453.469
SU3-159-145	02/10/2006	Plutonium-239/240	62	0.043	0.022	J	J	1464525.650	598453.469
SU3-159-145	02/10/2006	Thorium-228	2.6	1.340	0.080			1464525.650	598453.469
SU3-159-145	02/10/2006	Thorium-230	2.8	1.280	0.060			1464525.650	598453.469
SU3-159-145	02/10/2006	Thorium-232	2.1	0.950	0.050			1464525.650	598453.469
SU3-159-146	02/14/2006	Plutonium-238	55	0.059	0.031	J	J	1464540.650	598453.469
SU3-159-146	02/14/2006	Plutonium-239/240	62	0.018	0.018	U	UJ	1464540.650	598453.469
SU3-159-146	02/14/2006	Thorium-228	2.6	1.420	0.080			1464540.650	598453.469
SU3-159-146	02/14/2006	Thorium-230	2.8	1.080	0.060			1464540.650	598453.469
SU3-159-146	02/14/2006	Thorium-232	2.1	1.410	0.040			1464540.650	598453.469
SU3-159-147	02/14/2006	Plutonium-238	55	0.203	0.034			1464555.650	598453.469
SU3-159-147	02/14/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464555.650	598453.469
SU3-159-147	02/14/2006	Thorium-228	2.6	1.180	0.070			1464555.650	598453.469
SU3-159-147	02/14/2006	Thorium-230	2.8	0.720	0.050			1464555.650	598453.469
SU3-159-147	02/14/2006	Thorium-232	2.1	1.240	0.040			1464555.650	598453.469
SU3-159-148	02/14/2006	Plutonium-238	55	0.400	0.036			1464570.650	598453.469
SU3-159-148	02/14/2006	Plutonium-239/240	62	0.038	0.028	J	J	1464570.650	598453.469
SU3-159-148	02/14/2006	Thorium-228	2.6	1.170	0.060			1464570.650	598453.469
SU3-159-148	02/14/2006	Thorium-230	2.8	0.930	0.050			1464570.650	598453.469
SU3-159-148	02/14/2006	Thorium-232	2.1	1.180	0.050			1464570.650	598453.469
SU3-159-149	02/14/2006	Plutonium-238	55	0.411	0.030			1464585.650	598453.469
SU3-159-149	02/14/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464585.650	598453.469
SU3-159-149	02/14/2006	Thorium-228	2.6	1.520	0.080			1464585.650	598453.469
SU3-159-149	02/14/2006	Thorium-230	2.8	1.140	0.060			1464585.650	598453.469
SU3-159-149	02/14/2006	Thorium-232	2.1	1.270	0.040			1464585.650	598453.469
SU3-159-149D	02/14/2006	Plutonium-238	55	0.510	0.040			1464585.650	598453.469
SU3-159-149D	02/14/2006	Plutonium-239/240	62	0.020	0.020	U	U	1464585.650	598453.469
SU3-159-149D	02/14/2006	Thorium-228	2.6	1.190	0.060			1464585.650	598453.469
SU3-159-149D	02/14/2006	Thorium-230	2.8	1.050	0.050			1464585.650	598453.469
SU3-159-149D	02/14/2006	Thorium-232	2.1	1.330	0.040			1464585.650	598453.469
SU3-159-150	02/10/2006	Plutonium-238	55	0.029	0.029	U	UJ	1464600.650	598453.469
SU3-159-150	02/10/2006	Plutonium-239/240	62	0.027	0.027	U	UJ	1464600.650	598453.469

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU3-159-150	02/10/2006	Thorium-228	2.6	1.050	0.070			1464600.650	598453.469
SU3-159-150	02/10/2006	Thorium-230	2.8	1.060	0.070			1464600.650	598453.469
SU3-159-150	02/10/2006	Thorium-232	2.1	1.130	0.050			1464600.650	598453.469
SU3-159-150D	02/10/2006	Plutonium-238	55	0.031	0.031	U	UJ	1464600.650	598453.469
SU3-159-150D	02/10/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464600.650	598453.469
SU3-159-150D	02/10/2006	Thorium-228	2.6	0.990	0.060			1464600.650	598453.469
SU3-159-150D	02/10/2006	Thorium-230	2.8	0.790	0.050			1464600.650	598453.469
SU3-159-150D	02/10/2006	Thorium-232	2.1	0.860	0.040			1464600.650	598453.469
SU3-159-151	02/10/2006	Plutonium-238	55	0.031	0.031	U	U	1464615.650	598453.469
SU3-159-151	02/10/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464615.650	598453.469
SU3-159-151	02/10/2006	Thorium-228	2.6	1.440	0.090			1464615.650	598453.469
SU3-159-151	02/10/2006	Thorium-230	2.8	1.120	0.050			1464615.650	598453.469
SU3-159-151	02/10/2006	Thorium-232	2.1	1.380	0.060			1464615.650	598453.469
SU3-159-152	02/10/2006	Plutonium-238	55	0.033	0.033	U	UJ	1464533.150	598466.459
SU3-159-152	02/10/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464533.150	598466.459
SU3-159-152	02/10/2006	Thorium-228	2.6	1.460	0.080			1464533.150	598466.459
SU3-159-152	02/10/2006	Thorium-230	2.8	1.160	0.070			1464533.150	598466.459
SU3-159-152	02/10/2006	Thorium-232	2.1	1.130	0.050			1464533.150	598466.459
SU3-159-153	02/14/2006	Plutonium-238	55	3.730	0.030			1464548.150	598466.459
SU3-159-153	02/14/2006	Plutonium-239/240	62	0.031	0.026	J	J	1464548.150	598466.459
SU3-159-153	02/14/2006	Thorium-228	2.6	1.290	0.090			1464548.150	598466.459
SU3-159-153	02/14/2006	Thorium-230	2.8	1.040	0.050			1464548.150	598466.459
SU3-159-153	02/14/2006	Thorium-232	2.1	1.230	0.050			1464548.150	598466.459
SU3-159-154	02/14/2006	Plutonium-238	55	7.040	0.030			1464563.150	598466.459
SU3-159-154	02/14/2006	Plutonium-239/240	62	0.034	0.023	J	J	1464563.150	598466.459
SU3-159-154	02/14/2006	Thorium-228	2.6	1.260	0.070			1464563.150	598466.459
SU3-159-154	02/14/2006	Thorium-230	2.8	0.980	0.050			1464563.150	598466.459
SU3-159-154	02/14/2006	Thorium-232	2.1	1.510	0.050			1464563.150	598466.459
SU3-159-155	02/14/2006	Plutonium-238	55	2.130	0.020			1464578.150	598466.459
SU3-159-155	02/14/2006	Plutonium-239/240	62	0.016	0.016	U	UJ	1464578.150	598466.459
SU3-159-155	02/14/2006	Thorium-228	2.6	1.530	0.110			1464578.150	598466.459
SU3-159-155	02/14/2006	Thorium-230	2.8	0.990	0.060			1464578.150	598466.459
SU3-159-155	02/14/2006	Thorium-232	2.1	1.330	0.090			1464578.150	598466.459
SU3-159-156	02/09/2006	Plutonium-238	55	0.024	0.024	U	UJ	1464593.150	598466.459
SU3-159-156	02/09/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464593.150	598466.459
SU3-159-156	02/09/2006	Thorium-228	2.6	1.270	0.080			1464593.150	598466.459
SU3-159-156	02/09/2006	Thorium-230	2.8	0.980	0.070			1464593.150	598466.459
SU3-159-156	02/09/2006	Thorium-232	2.1	0.910	0.090			1464593.150	598466.459
SU3-159-157	02/09/2006	Plutonium-238	55	0.030	0.030	U	UJ	1464608.150	598466.459
SU3-159-157	02/09/2006	Plutonium-239/240	62	0.028	0.028	U	UJ	1464608.150	598466.459
SU3-159-157	02/09/2006	Thorium-228	2.6	1.180	0.070			1464608.150	598466.459
SU3-159-157	02/09/2006	Thorium-230	2.8	0.940	0.050			1464608.150	598466.459
SU3-159-157	02/09/2006	Thorium-232	2.1	0.960	0.040			1464608.150	598466.459
SU3-159-158	02/09/2006	Plutonium-238	55	0.084	0.033	J	J	1464623.150	598466.459
SU3-159-158	02/09/2006	Plutonium-239/240	62	0.028	0.028	U	UJ	1464623.150	598466.459
SU3-159-158	02/09/2006	Thorium-228	2.6	0.880	0.070			1464623.150	598466.459
SU3-159-158	02/09/2006	Thorium-230	2.8	0.750	0.050			1464623.150	598466.459
SU3-159-158	02/09/2006	Thorium-232	2.1	0.870	0.060			1464623.150	598466.459
SU3-159-159	02/09/2006	Plutonium-238	55	0.024	0.024	U	U	1464525.650	598479.450
SU3-159-159	02/09/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464525.650	598479.450
SU3-159-159	02/09/2006	Thorium-228	2.6	1.150	0.100			1464525.650	598479.450
SU3-159-159	02/09/2006	Thorium-230	2.8	1.120	0.050			1464525.650	598479.450
SU3-159-159	02/09/2006	Thorium-232	2.1	1.300	0.070			1464525.650	598479.450
SU3-159-160	02/14/2006	Plutonium-238	55	7.300	0.030			1464540.650	598479.450
SU3-159-160	02/14/2006	Plutonium-239/240	62	0.053	0.017	J	J	1464540.650	598479.450
SU3-159-160	02/14/2006	Thorium-228	2.6	1.140	0.100			1464540.650	598479.450
SU3-159-160	02/14/2006	Thorium-230	2.8	1.110	0.060			1464540.650	598479.450
SU3-159-160	02/14/2006	Thorium-232	2.1	1.020	0.060			1464540.650	598479.450
SU3-159-161	02/14/2006	Plutonium-238	55	0.900	0.030		J	1464555.650	598479.450
SU3-159-161	02/14/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464555.650	598479.450
SU3-159-161	02/14/2006	Thorium-228	2.6	1.470	0.030			1464555.650	598479.450

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU3-159-161	02/14/2006	Thorium-230	2.8	0.780	0.050			1464555.650	598479.450
SU3-159-161	02/14/2006	Thorium-232	2.1	1.200	0.050			1464555.650	598479.450
SU3-159-162	02/14/2006	Plutonium-238	55	1.660	0.040			1464570.650	598479.450
SU3-159-162	02/14/2006	Plutonium-239/240	62	0.018	0.018	U	UJ	1464570.650	598479.450
SU3-159-162	02/14/2006	Thorium-228	2.6	1.200	0.090			1464570.650	598479.450
SU3-159-162	02/14/2006	Thorium-230	2.8	1.090	0.050			1464570.650	598479.450
SU3-159-162	02/14/2006	Thorium-232	2.1	1.180	0.050			1464570.650	598479.450
SU3-159-163	02/14/2006	Plutonium-238	55	0.900	0.020			1464585.650	598479.450
SU3-159-163	02/14/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464585.650	598479.450
SU3-159-163	02/14/2006	Thorium-228	2.6	1.000	0.090			1464585.650	598479.450
SU3-159-163	02/14/2006	Thorium-230	2.8	0.980	0.050			1464585.650	598479.450
SU3-159-163	02/14/2006	Thorium-232	2.1	1.090	0.040			1464585.650	598479.450
SU3-159-164	02/09/2006	Plutonium-238	55	0.039	0.034	J	J	1464600.650	598479.450
SU3-159-164	02/09/2006	Plutonium-239/240	62	0.017	0.017	U	UJ	1464600.650	598479.450
SU3-159-164	02/09/2006	Thorium-228	2.6	1.490	0.080			1464600.650	598479.450
SU3-159-164	02/09/2006	Thorium-230	2.8	1.140	0.030			1464600.650	598479.450
SU3-159-164	02/09/2006	Thorium-232	2.1	1.430	0.050			1464600.650	598479.450
SU3-159-165	02/09/2006	Plutonium-238	55	0.028	0.028	U	UJ	1464615.650	598479.450
SU3-159-165	02/09/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464615.650	598479.450
SU3-159-165	02/09/2006	Thorium-228	2.6	1.420	0.100			1464615.650	598479.450
SU3-159-165	02/09/2006	Thorium-230	2.8	1.030	0.070			1464615.650	598479.450
SU3-159-165	02/09/2006	Thorium-232	2.1	1.470	0.030			1464615.650	598479.450
SU3-159-166	02/09/2006	Plutonium-238	55	1.060	0.030			1464533.150	598492.440
SU3-159-166	02/09/2006	Plutonium-239/240	62	0.011	0.011	U	UJ	1464533.150	598492.440
SU3-159-166	02/09/2006	Thorium-228	2.6	1.160	0.100			1464533.150	598492.440
SU3-159-166	02/09/2006	Thorium-230	2.8	0.810	0.060			1464533.150	598492.440
SU3-159-166	02/09/2006	Thorium-232	2.1	1.270	0.060			1464533.150	598492.440
SU3-159-167	02/09/2006	Plutonium-238	55	4.790	0.020			1464548.150	598492.440
SU3-159-167	02/09/2006	Plutonium-239/240	62	0.035	0.020	J	J	1464548.150	598492.440
SU3-159-167	02/09/2006	Thorium-228	2.6	1.280	0.070			1464548.150	598492.440
SU3-159-167	02/09/2006	Thorium-230	2.8	0.820	0.040			1464548.150	598492.440
SU3-159-167	02/09/2006	Thorium-232	2.1	0.940	0.060			1464548.150	598492.440
SU3-159-168	02/09/2006	Plutonium-238	55	0.218	0.038			1464563.150	598492.440
SU3-159-168	02/09/2006	Plutonium-239/240	62	0.030	0.030	U	UJ	1464563.150	598492.440
SU3-159-168	02/09/2006	Thorium-228	2.6	1.230	0.040			1464563.150	598492.440
SU3-159-168	02/09/2006	Thorium-230	2.8	0.890	0.040			1464563.150	598492.440
SU3-159-168	02/09/2006	Thorium-232	2.1	0.960	0.030			1464563.150	598492.440
SU3-159-169	02/09/2006	Plutonium-238	55	0.150	0.028			1464578.150	598492.440
SU3-159-169	02/09/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464578.150	598492.440
SU3-159-169	02/09/2006	Thorium-228	2.6	1.270	0.060			1464578.150	598492.440
SU3-159-169	02/09/2006	Thorium-230	2.8	1.170	0.030			1464578.150	598492.440
SU3-159-169	02/09/2006	Thorium-232	2.1	1.250	0.040			1464578.150	598492.440
SU3-159-170	02/09/2006	Plutonium-238	55	0.500	0.030			1464593.150	598492.440
SU3-159-170	02/09/2006	Plutonium-239/240	62	0.011	0.011	U	UJ	1464593.150	598492.440
SU3-159-170	02/09/2006	Thorium-228	2.6	0.990	0.050			1464593.150	598492.440
SU3-159-170	02/09/2006	Thorium-230	2.8	0.820	0.040			1464593.150	598492.440
SU3-159-170	02/09/2006	Thorium-232	2.1	1.100	0.020			1464593.150	598492.440
SU3-159-171	02/09/2006	Plutonium-238	55	0.045	0.034	J	J	1464608.150	598492.440
SU3-159-171	02/09/2006	Plutonium-239/240	62	0.018	0.018	U	UJ	1464608.150	598492.440
SU3-159-171	02/09/2006	Thorium-228	2.6	1.150	0.060			1464608.150	598492.440
SU3-159-171	02/09/2006	Thorium-230	2.8	0.980	0.030			1464608.150	598492.440
SU3-159-171	02/09/2006	Thorium-232	2.1	1.220	0.030			1464608.150	598492.440
SU3-159-172	02/09/2006	Plutonium-238	55	1.070	0.030			1464525.650	598505.430
SU3-159-172	02/09/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464525.650	598505.430
SU3-159-172	02/09/2006	Thorium-228	2.6	1.140	0.050			1464525.650	598505.430
SU3-159-172	02/09/2006	Thorium-230	2.8	0.830	0.030			1464525.650	598505.430
SU3-159-172	02/09/2006	Thorium-232	2.1	1.100	0.030			1464525.650	598505.430
SU3-159-173	02/09/2006	Plutonium-238	55	0.108	0.035			1464540.650	598505.430
SU3-159-173	02/09/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464540.650	598505.430
SU3-159-173	02/09/2006	Thorium-228	2.6	1.340	0.070			1464540.650	598505.430
SU3-159-173	02/09/2006	Thorium-230	2.8	1.040	0.040			1464540.650	598505.430

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU3-159-173	02/09/2006	Thorium-232	2.1	1.150	0.060			1464540.650	598505.430
SU3-159-174	02/09/2006	Plutonium-238	55	0.040	0.026	J	J	1464555.650	598505.430
SU3-159-174	02/09/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464555.650	598505.430
SU3-159-174	02/09/2006	Thorium-228	2.6	1.250	0.050			1464555.650	598505.430
SU3-159-174	02/09/2006	Thorium-230	2.8	0.990	0.040			1464555.650	598505.430
SU3-159-174	02/09/2006	Thorium-232	2.1	1.080	0.050			1464555.650	598505.430
SU3-159-175	02/09/2006	Plutonium-238	55	0.124	0.025			1464570.650	598505.430
SU3-159-175	02/09/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464570.650	598505.430
SU3-159-175	02/09/2006	Thorium-228	2.6	1.160	0.070			1464570.650	598505.430
SU3-159-175	02/09/2006	Thorium-230	2.8	0.960	0.060			1464570.650	598505.430
SU3-159-175	02/09/2006	Thorium-232	2.1	1.190	0.070			1464570.650	598505.430
SU3-159-176	02/09/2006	Plutonium-238	55	1.090	0.030		J	1464585.650	598505.430
SU3-159-176	02/09/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464585.650	598505.430
SU3-159-176	02/09/2006	Thorium-228	2.6	1.200	0.050			1464585.650	598505.430
SU3-159-176	02/09/2006	Thorium-230	2.8	0.890	0.030			1464585.650	598505.430
SU3-159-176	02/09/2006	Thorium-232	2.1	1.230	0.040			1464585.650	598505.430
SU3-159-176D	02/09/2006	Plutonium-238	55	0.257	0.023		J	1464585.650	598505.430
SU3-159-176D	02/09/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464585.650	598505.430
SU3-159-176D	02/09/2006	Thorium-228	2.6	1.280	0.070			1464585.650	598505.430
SU3-159-176D	02/09/2006	Thorium-230	2.8	0.830	0.030			1464585.650	598505.430
SU3-159-176D	02/09/2006	Thorium-232	2.1	1.140	0.040			1464585.650	598505.430
SU3-159-177	02/09/2006	Plutonium-238	55	0.316	0.035			1464600.650	598505.430
SU3-159-177	02/09/2006	Plutonium-239/240	62	0.028	0.028	U	UJ	1464600.650	598505.430
SU3-159-177	02/09/2006	Thorium-228	2.6	1.430	0.100			1464600.650	598505.430
SU3-159-177	02/09/2006	Thorium-230	2.8	1.150	0.060			1464600.650	598505.430
SU3-159-177	02/09/2006	Thorium-232	2.1	1.300	0.060			1464600.650	598505.430
SU3-159-178	02/09/2006	Plutonium-238	55	0.181	0.022			1464615.650	598505.430
SU3-159-178	02/09/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464615.650	598505.430
SU3-159-178	02/09/2006	Thorium-228	2.6	1.220	0.020			1464615.650	598505.430
SU3-159-178	02/09/2006	Thorium-230	2.8	0.790	0.030			1464615.650	598505.430
SU3-159-178	02/09/2006	Thorium-232	2.1	1.150	0.040			1464615.650	598505.430
SU3-159-179	02/09/2006	Plutonium-238	55	0.065	0.030	J	J	1464533.150	598518.421
SU3-159-179	02/09/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464533.150	598518.421
SU3-159-179	02/09/2006	Thorium-228	2.6	1.230	0.060			1464533.150	598518.421
SU3-159-179	02/09/2006	Thorium-230	2.8	0.830	0.040			1464533.150	598518.421
SU3-159-179	02/09/2006	Thorium-232	2.1	1.090	0.020			1464533.150	598518.421
SU3-159-180	02/09/2006	Plutonium-238	55	0.029	0.029	U	UJ	1464548.150	598518.421
SU3-159-180	02/09/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464548.150	598518.421
SU3-159-180	02/09/2006	Thorium-228	2.6	1.150	0.060			1464548.150	598518.421
SU3-159-180	02/09/2006	Thorium-230	2.8	0.940	0.050			1464548.150	598518.421
SU3-159-180	02/09/2006	Thorium-232	2.1	1.250	0.030			1464548.150	598518.421
SU3-159-181	02/09/2006	Plutonium-238	55	0.089	0.021	J	J	1464563.150	598518.421
SU3-159-181	02/09/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464563.150	598518.421
SU3-159-181	02/09/2006	Thorium-228	2.6	1.140	0.070			1464563.150	598518.421
SU3-159-181	02/09/2006	Thorium-230	2.8	0.980	0.040		J	1464563.150	598518.421
SU3-159-181	02/09/2006	Thorium-232	2.1	1.210	0.040			1464563.150	598518.421
SU3-159-182	02/09/2006	Plutonium-238	55	0.037	0.037	U	UJ	1464578.150	598518.421
SU3-159-182	02/09/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464578.150	598518.421
SU3-159-182	02/09/2006	Thorium-228	2.6	1.390	0.040			1464578.150	598518.421
SU3-159-182	02/09/2006	Thorium-230	2.8	0.980	0.030			1464578.150	598518.421
SU3-159-182	02/09/2006	Thorium-232	2.1	1.190	0.020			1464578.150	598518.421
SU3-159-183	02/09/2006	Plutonium-238	55	4.120	0.020			1464593.150	598518.421
SU3-159-183	02/09/2006	Plutonium-239/240	62	0.043	0.021	J	J	1464593.150	598518.421
SU3-159-183	02/09/2006	Thorium-228	2.6	1.190	0.130			1464593.150	598518.421
SU3-159-183	02/09/2006	Thorium-230	2.8	0.910	0.080			1464593.150	598518.421
SU3-159-183	02/09/2006	Thorium-232	2.1	1.060	0.080			1464593.150	598518.421
SU3-159-184	02/09/2006	Plutonium-238	55	1.280	0.040			1464608.150	598518.421
SU3-159-184	02/09/2006	Plutonium-239/240	62	0.048	0.022	J	J	1464608.150	598518.421
SU3-159-184	02/09/2006	Thorium-228	2.6	1.160	0.050			1464608.150	598518.421
SU3-159-184	02/09/2006	Thorium-230	2.8	1.000	0.030			1464608.150	598518.421
SU3-159-184	02/09/2006	Thorium-232	2.1	1.320	0.040			1464608.150	598518.421

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU3-159-185	02/09/2006	Plutonium-238	55	4.230	0.020			1464525.650	598531.411
SU3-159-185	02/09/2006	Plutonium-239/240	62	0.059	0.017	J	J	1464525.650	598531.411
SU3-159-185	02/09/2006	Thorium-228	2.6	0.830	0.070			1464525.650	598531.411
SU3-159-185	02/09/2006	Thorium-230	2.8	0.720	0.020			1464525.650	598531.411
SU3-159-185	02/09/2006	Thorium-232	2.1	0.690	0.040			1464525.650	598531.411
SU3-159-186	02/09/2006	Plutonium-238	55	27.000	0.030			1464540.650	598531.411
SU3-159-186	02/09/2006	Plutonium-239/240	62	0.268	0.019			1464540.650	598531.411
SU3-159-186	02/09/2006	Thorium-228	2.6	1.040	0.040			1464540.650	598531.411
SU3-159-186	02/09/2006	Thorium-230	2.8	0.960	0.030			1464540.650	598531.411
SU3-159-186	02/09/2006	Thorium-232	2.1	0.840	0.030			1464540.650	598531.411
SU3-159-187	02/09/2006	Plutonium-238	55	1.030	0.020			1464555.650	598531.411
SU3-159-187	02/09/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464555.650	598531.411
SU3-159-187	02/09/2006	Thorium-228	2.6	1.420	0.050			1464555.650	598531.411
SU3-159-187	02/09/2006	Thorium-230	2.8	1.240	0.020			1464555.650	598531.411
SU3-159-187	02/09/2006	Thorium-232	2.1	1.400	0.030			1464555.650	598531.411
SU3-159-188	02/09/2006	Plutonium-238	55	0.085	0.029	J	J	1464570.650	598531.411
SU3-159-188	02/09/2006	Plutonium-239/240	62	0.013	0.013	U	UJ	1464570.650	598531.411
SU3-159-188	02/09/2006	Thorium-228	2.6	1.060	0.050			1464570.650	598531.411
SU3-159-188	02/09/2006	Thorium-230	2.8	0.730	0.040			1464570.650	598531.411
SU3-159-188	02/09/2006	Thorium-232	2.1	0.960	0.020			1464570.650	598531.411
SU3-159-189	02/09/2006	Plutonium-238	55	0.470	0.020			1464585.650	598531.411
SU3-159-189	02/09/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464585.650	598531.411
SU3-159-189	02/09/2006	Thorium-228	2.6	1.180	0.060			1464585.650	598531.411
SU3-159-189	02/09/2006	Thorium-230	2.8	1.080	0.040			1464585.650	598531.411
SU3-159-189	02/09/2006	Thorium-232	2.1	1.140	0.040			1464585.650	598531.411
SU3-159-190	02/09/2006	Plutonium-238	55	1.980	0.030			1464600.650	598531.411
SU3-159-190	02/09/2006	Plutonium-239/240	62	0.062	0.020	J	J	1464600.650	598531.411
SU3-159-190	02/09/2006	Thorium-228	2.6	1.140	0.040			1464600.650	598531.411
SU3-159-190	02/09/2006	Thorium-230	2.8	1.060	0.020			1464600.650	598531.411
SU3-159-190	02/09/2006	Thorium-232	2.1	1.200	0.030			1464600.650	598531.411
SU3-159-191	02/09/2006	Plutonium-238	55	0.038	0.023	J	J	1464548.150	598544.402
SU3-159-191	02/09/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464548.150	598544.402
SU3-159-191	02/09/2006	Thorium-228	2.6	1.160	0.060			1464548.150	598544.402
SU3-159-191	02/09/2006	Thorium-230	2.8	0.780	0.020			1464548.150	598544.402
SU3-159-191	02/09/2006	Thorium-232	2.1	1.100	0.040			1464548.150	598544.402
SU3-159-192	02/09/2006	Plutonium-238	55	6.520	0.030			1464563.150	598544.402
SU3-159-192	02/09/2006	Plutonium-239/240	62	0.061	0.031	J	J	1464563.150	598544.402
SU3-159-192	02/09/2006	Thorium-228	2.6	0.660	0.040			1464563.150	598544.402
SU3-159-192	02/09/2006	Thorium-230	2.8	1.400	0.030			1464563.150	598544.402
SU3-159-192	02/09/2006	Thorium-232	2.1	0.710	0.020			1464563.150	598544.402
SU3-159-192D	02/09/2006	Plutonium-238	55	8.100	0.020			1464563.150	598544.402
SU3-159-192D	02/09/2006	Plutonium-239/240	62	0.068	0.021	J	J	1464563.150	598544.402
SU3-159-192D	02/09/2006	Thorium-228	2.6	0.690	0.050			1464563.150	598544.402
SU3-159-192D	02/09/2006	Thorium-230	2.8	1.170	0.020			1464563.150	598544.402
SU3-159-192D	02/09/2006	Thorium-232	2.1	0.540	0.020			1464563.150	598544.402
SU4-159-193	02/09/2006	Plutonium-238	55	0.041	0.041	U	UJ	1464648.404	598376.692
SU4-159-193	02/09/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464648.404	598376.692
SU4-159-193	02/09/2006	Thorium-228	2.6	1.070	0.050			1464648.404	598376.692
SU4-159-193	02/09/2006	Thorium-230	2.8	0.940	0.030			1464648.404	598376.692
SU4-159-193	02/09/2006	Thorium-232	2.1	1.190	0.010			1464648.404	598376.692
SU4-159-194	02/09/2006	Plutonium-238	55	0.261	0.041			1464663.404	598376.692
SU4-159-194	02/09/2006	Plutonium-239/240	62	0.030	0.030	U	U	1464663.404	598376.692
SU4-159-194	02/09/2006	Thorium-228	2.6	1.200	0.040			1464663.404	598376.692
SU4-159-194	02/09/2006	Thorium-230	2.8	0.960	0.040			1464663.404	598376.692
SU4-159-194	02/09/2006	Thorium-232	2.1	1.300	0.030			1464663.404	598376.692
SU4-159-195	02/09/2006	Plutonium-238	55	0.044	0.044	U	UJ	1464678.404	598376.692
SU4-159-195	02/09/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464678.404	598376.692
SU4-159-195	02/09/2006	Thorium-228	2.6	1.460	0.050			1464678.404	598376.692
SU4-159-195	02/09/2006	Thorium-230	2.8	1.160	0.020			1464678.404	598376.692
SU4-159-195	02/09/2006	Thorium-232	2.1	1.440	0.040			1464678.404	598376.692
SU4-159-196	02/09/2006	Plutonium-238	55	1.060	0.040			1464693.404	598376.692

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU4-159-196	02/09/2006	Plutonium-239/240	62	0.017	0.012	J	J	1464693.404	598376.692
SU4-159-196	02/09/2006	Thorium-228	2.6	0.220	0.034			1464693.404	598376.692
SU4-159-196	02/09/2006	Thorium-230	2.8	0.840	0.030		J	1464693.404	598376.692
SU4-159-196	02/09/2006	Thorium-232	2.1	0.196	0.011			1464693.404	598376.692
SU4-159-197	03/01/2006	Plutonium-238	55	4.170	0.050		J	1464708.404	598376.692
SU4-159-197	03/01/2006	Plutonium-239/240	62	0.043	0.043	U	UJ	1464708.404	598376.692
SU4-159-197	03/01/2006	Thorium-228	2.6	0.400	0.100			1464708.404	598376.692
SU4-159-197	03/01/2006	Thorium-230	2.8	0.860	0.070			1464708.404	598376.692
SU4-159-197	03/01/2006	Thorium-232	2.1	0.330	0.030			1464708.404	598376.692
SU4-159-198	02/09/2006	Plutonium-238	55	1.570	0.030			1464723.404	598376.692
SU4-159-198	02/09/2006	Plutonium-239/240	62	0.022	0.010	J	J	1464723.404	598376.692
SU4-159-198	02/09/2006	Thorium-228	2.6	0.680	0.050			1464723.404	598376.692
SU4-159-198	02/09/2006	Thorium-230	2.8	0.980	0.020			1464723.404	598376.692
SU4-159-198	02/09/2006	Thorium-232	2.1	0.600	0.030			1464723.404	598376.692
SU4-159-199	02/09/2006	Plutonium-238	55	17.500	0.040			1464640.904	598389.683
SU4-159-199	02/09/2006	Plutonium-239/240	62	0.162	0.026			1464640.904	598389.683
SU4-159-199	02/09/2006	Thorium-228	2.6	1.210	0.070			1464640.904	598389.683
SU4-159-199	02/09/2006	Thorium-230	2.8	1.000	0.050			1464640.904	598389.683
SU4-159-199	02/09/2006	Thorium-232	2.1	1.070	0.030			1464640.904	598389.683
SU4-159-200	02/09/2006	Plutonium-238	55	2.870	0.040			1464655.904	598389.683
SU4-159-200	02/09/2006	Plutonium-239/240	62	0.028	0.028	U	UJ	1464655.904	598389.683
SU4-159-200	02/09/2006	Thorium-228	2.6	1.050	0.060			1464655.904	598389.683
SU4-159-200	02/09/2006	Thorium-230	2.8	1.060	0.030			1464655.904	598389.683
SU4-159-200	02/09/2006	Thorium-232	2.1	1.060	0.030			1464655.904	598389.683
SU4-159-201	03/01/2006	Plutonium-238	55	0.203	0.078			1464670.904	598389.683
SU4-159-201	03/01/2006	Plutonium-239/240	62	0.048	0.048	U	UJ	1464670.904	598389.683
SU4-159-201	03/01/2006	Thorium-228	2.6	1.200	0.100			1464670.904	598389.683
SU4-159-201	03/01/2006	Thorium-230	2.8	1.090	0.080			1464670.904	598389.683
SU4-159-201	03/01/2006	Thorium-232	2.1	1.140	0.070			1464670.904	598389.683
SU4-159-202	02/09/2006	Plutonium-238	55	0.720	0.040			1464685.904	598389.683
SU4-159-202	02/09/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464685.904	598389.683
SU4-159-202	02/09/2006	Thorium-228	2.6	1.160	0.050			1464685.904	598389.683
SU4-159-202	02/09/2006	Thorium-230	2.8	1.000	0.030			1464685.904	598389.683
SU4-159-202	02/09/2006	Thorium-232	2.1	1.060	0.020			1464685.904	598389.683
SU4-159-203	02/09/2006	Plutonium-238	55	0.061	0.039	J	J	1464700.904	598389.683
SU4-159-203	02/09/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464700.904	598389.683
SU4-159-203	02/09/2006	Thorium-228	2.6	1.000	0.040			1464700.904	598389.683
SU4-159-203	02/09/2006	Thorium-230	2.8	0.830	0.030			1464700.904	598389.683
SU4-159-203	02/09/2006	Thorium-232	2.1	1.180	0.020			1464700.904	598389.683
SU4-159-204	02/09/2006	Plutonium-238	55	0.104	0.026			1464715.904	598389.683
SU4-159-204	02/09/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464715.904	598389.683
SU4-159-204	02/09/2006	Thorium-228	2.6	1.060	0.040			1464715.904	598389.683
SU4-159-204	02/09/2006	Thorium-230	2.8	0.800	0.030			1464715.904	598389.683
SU4-159-204	02/09/2006	Thorium-232	2.1	1.170	0.020			1464715.904	598389.683
SU4-159-205	02/14/2006	Plutonium-238	55	51.500	0.030			1464648.404	598402.673
SU4-159-205	02/14/2006	Plutonium-239/240	62	0.313	0.017			1464648.404	598402.673
SU4-159-205	02/14/2006	Thorium-228	2.6	1.580	0.050			1464648.404	598402.673
SU4-159-205	02/14/2006	Thorium-230	2.8	0.890	0.030			1464648.404	598402.673
SU4-159-205	02/14/2006	Thorium-232	2.1	1.180	0.020			1464648.404	598402.673
SU4-159-206	03/01/2006	Plutonium-238	55	0.108	0.081	J	J	1464663.404	598402.673
SU4-159-206	03/01/2006	Plutonium-239/240	62	0.046	0.046	U	UJ	1464663.404	598402.673
SU4-159-206	03/01/2006	Thorium-228	2.6	0.900	0.100			1464663.404	598402.673
SU4-159-206	03/01/2006	Thorium-230	2.8	0.850	0.110			1464663.404	598402.673
SU4-159-206	03/01/2006	Thorium-232	2.1	0.890	0.110			1464663.404	598402.673
SU4-159-207	02/14/2006	Plutonium-238	55	0.058	0.030	J	J	1464678.404	598402.673
SU4-159-207	02/14/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464678.404	598402.673
SU4-159-207	02/14/2006	Thorium-228	2.6	0.940	0.060			1464678.404	598402.673
SU4-159-207	02/14/2006	Thorium-230	2.8	0.960	0.040			1464678.404	598402.673
SU4-159-207	02/14/2006	Thorium-232	2.1	1.100	0.030			1464678.404	598402.673
SU4-159-208	02/09/2006	Plutonium-238	55	0.780	0.030			1464693.404	598402.673
SU4-159-208	02/09/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464693.404	598402.673

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU4-159-208	02/09/2006	Thorium-228	2.6	1.070	0.040			1464693.404	598402.673
SU4-159-208	02/09/2006	Thorium-230	2.8	0.870	0.030			1464693.404	598402.673
SU4-159-208	02/09/2006	Thorium-232	2.1	1.110	0.030			1464693.404	598402.673
SU4-159-209	02/09/2006	Plutonium-238	55	1.540	0.030			1464708.404	598402.673
SU4-159-209	02/09/2006	Plutonium-239/240	62	0.020	0.020	U	UJ	1464708.404	598402.673
SU4-159-209	02/09/2006	Thorium-228	2.6	0.219	0.032			1464708.404	598402.673
SU4-159-209	02/09/2006	Thorium-230	2.8	0.520	0.020			1464708.404	598402.673
SU4-159-209	02/09/2006	Thorium-232	2.1	0.215	0.013			1464708.404	598402.673
SU4-159-210	02/09/2006	Plutonium-238	55	0.030	0.030	U	U	1464723.404	598402.673
SU4-159-210	02/09/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464723.404	598402.673
SU4-159-210	02/09/2006	Thorium-228	2.6	1.260	0.030			1464723.404	598402.673
SU4-159-210	02/09/2006	Thorium-230	2.8	0.890	0.040			1464723.404	598402.673
SU4-159-210	02/09/2006	Thorium-232	2.1	1.210	0.040			1464723.404	598402.673
SU4-159-211	02/14/2006	Plutonium-238	55	4.750	0.030			1464640.904	598415.663
SU4-159-211	02/14/2006	Plutonium-239/240	62	0.052	0.020	J	J	1464640.904	598415.663
SU4-159-211	02/14/2006	Thorium-228	2.6	1.240	0.060			1464640.904	598415.663
SU4-159-211	02/14/2006	Thorium-230	2.8	0.910	0.050			1464640.904	598415.663
SU4-159-211	02/14/2006	Thorium-232	2.1	1.050	0.020			1464640.904	598415.663
SU4-159-212	02/14/2006	Plutonium-238	55	2.560	0.020			1464655.904	598415.663
SU4-159-212	02/14/2006	Plutonium-239/240	62	0.017	0.017	J	J	1464655.904	598415.663
SU4-159-212	02/14/2006	Thorium-228	2.6	1.140	0.040			1464655.904	598415.663
SU4-159-212	02/14/2006	Thorium-230	2.8	0.810	0.040			1464655.904	598415.663
SU4-159-212	02/14/2006	Thorium-232	2.1	0.990	0.030			1464655.904	598415.663
SU4-159-213	**03/01/2006**	**Plutonium-238**	**55**	**98.000**	**0.060**			**1464670.904**	**598415.663**
SU4-159-213	03/01/2006	Plutonium-239/240	62	1.010	0.050			1464670.904	598415.663
SU4-159-213	03/01/2006	Thorium-228	2.6	1.440	0.720		J	1464670.904	598415.663
SU4-159-213	03/01/2006	Thorium-230	2.8	0.930	0.480		J	1464670.904	598415.663
SU4-159-213	03/01/2006	Thorium-232	2.1	0.860	0.450		J	1464670.904	598415.663
SU4-159-214	02/09/2006	Plutonium-238	55	0.037	0.023	J	J	1464685.904	598415.663
SU4-159-214	02/09/2006	Plutonium-239/240	62	0.018	0.018	U	UJ	1464685.904	598415.663
SU4-159-214	02/09/2006	Thorium-228	2.6	1.190	0.060			1464685.904	598415.663
SU4-159-214	02/09/2006	Thorium-230	2.8	0.910	0.020			1464685.904	598415.663
SU4-159-214	02/09/2006	Thorium-232	2.1	1.200	0.020			1464685.904	598415.663
SU4-159-215	02/09/2006	Plutonium-238	55	2.230	0.030			1464700.904	598415.663
SU4-159-215	02/09/2006	Plutonium-239/240	62	0.026	0.026	U	U	1464700.904	598415.663
SU4-159-215	02/09/2006	Thorium-228	2.6	1.300	0.060			1464700.904	598415.663
SU4-159-215	02/09/2006	Thorium-230	2.8	0.920	0.020			1464700.904	598415.663
SU4-159-215	02/09/2006	Thorium-232	2.1	1.020	0.030			1464700.904	598415.663
SU4-159-216	02/09/2006	Plutonium-238	55	0.147	0.027			1464715.904	598415.663
SU4-159-216	02/09/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464715.904	598415.663
SU4-159-216	02/09/2006	Thorium-228	2.6	0.900	0.260			1464715.904	598415.663
SU4-159-216	02/09/2006	Thorium-230	2.8	0.880	0.180			1464715.904	598415.663
SU4-159-216	02/09/2006	Thorium-232	2.1	1.340	0.160		J	1464715.904	598415.663
SU4-159-216D	02/09/2006	Plutonium-238	55	0.169	0.021			1464715.904	598415.663
SU4-159-216D	02/09/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464715.904	598415.663
SU4-159-216D	02/09/2006	Thorium-228	2.6	1.170	0.110			1464715.904	598415.663
SU4-159-216D	02/09/2006	Thorium-230	2.8	0.730	0.050			1464715.904	598415.663
SU4-159-216D	02/09/2006	Thorium-232	2.1	1.230	0.080		J	1464715.904	598415.663
SU4-159-217	02/14/2006	Plutonium-238	55	20.700	0.020			1464633.404	598428.654
SU4-159-217	02/14/2006	Plutonium-239/240	62	0.212	0.020			1464633.404	598428.654
SU4-159-217	02/14/2006	Thorium-228	2.6	1.020	0.160			1464633.404	598428.654
SU4-159-217	02/14/2006	Thorium-230	2.8	0.690	0.050			1464633.404	598428.654
SU4-159-217	02/14/2006	Thorium-232	2.1	1.040	0.090		J	1464633.404	598428.654
SU4-159-218	03/01/2006	Plutonium-238	55	22.300	0.050			1464648.404	598428.654
SU4-159-218	03/01/2006	Plutonium-239/240	62	0.163	0.044	J	J	1464648.404	598428.654
SU4-159-218	03/01/2006	Thorium-228	2.6	1.080	0.130			1464648.404	598428.654
SU4-159-218	03/01/2006	Thorium-230	2.8	1.060	0.110			1464648.404	598428.654
SU4-159-218	03/01/2006	Thorium-232	2.1	0.820	0.110			1464648.404	598428.654
SU4-159-219	03/01/2006	Plutonium-238	55	28.600	0.080			1464663.404	598428.654
SU4-159-219	03/01/2006	Plutonium-239/240	62	0.199	0.051	J	J	1464663.404	598428.654
SU4-159-219	03/01/2006	Thorium-228	2.6	0.930	0.100			1464663.404	598428.654

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU4-159-219	03/01/2006	Thorium-230	2.8	1.160	0.070			1464663.404	598428.654
SU4-159-219	03/01/2006	Thorium-232	2.1	0.890	0.040			1464663.404	598428.654
SU4-159-220	02/08/2006	Plutonium-238	55	25.700	0.070			1464678.404	598428.654
SU4-159-220	02/08/2006	Plutonium-239/240	62	0.183	0.059	J	J	1464678.404	598428.654
SU4-159-220	02/08/2006	Thorium-228	2.6	1.670	0.200		J	1464678.404	598428.654
SU4-159-220	02/08/2006	Thorium-230	2.8	1.050	0.170			1464678.404	598428.654
SU4-159-220	02/08/2006	Thorium-232	2.1	1.810	0.070		J	1464678.404	598428.654
SU4-159-221	02/08/2006	Plutonium-238	55	4.760	0.050			1464693.404	598428.654
SU4-159-221	02/08/2006	Plutonium-239/240	62	0.040	0.040	U	UJ	1464693.404	598428.654
SU4-159-221	02/08/2006	Thorium-228	2.6	1.410	0.090		J	1464693.404	598428.654
SU4-159-221	02/08/2006	Thorium-230	2.8	1.090	0.120			1464693.404	598428.654
SU4-159-221	02/08/2006	Thorium-232	2.1	1.110	0.110		J	1464693.404	598428.654
SU4-159-222	02/09/2006	Plutonium-238	55	3.430	0.030			1464708.404	598428.654
SU4-159-222	02/09/2006	Plutonium-239/240	62	0.060	0.018	J	J	1464708.404	598428.654
SU4-159-222	02/09/2006	Thorium-228	2.6	1.110	0.120			1464708.404	598428.654
SU4-159-222	02/09/2006	Thorium-230	2.8	0.900	0.090			1464708.404	598428.654
SU4-159-222	02/09/2006	Thorium-232	2.1	1.140	0.060		J	1464708.404	598428.654
SU4-159-223	02/09/2006	Plutonium-238	55	0.062	0.035	J	J	1464723.404	598428.654
SU4-159-223	02/09/2006	Plutonium-239/240	62	0.018	0.018	U	UJ	1464723.404	598428.654
SU4-159-223	02/09/2006	Thorium-228	2.6	0.740	0.120			1464723.404	598428.654
SU4-159-223	02/09/2006	Thorium-230	2.8	0.820	0.060			1464723.404	598428.654
SU4-159-223	02/09/2006	Thorium-232	2.1	0.650	0.060		J	1464723.404	598428.654
SU4-159-224	02/08/2006	Plutonium-238	55	2.400	0.060			1464640.904	598441.644
SU4-159-224	02/08/2006	Plutonium-239/240	62	0.038	0.038	U	UJ	1464640.904	598441.644
SU4-159-224	02/08/2006	Thorium-228	2.6	1.080	0.120		J	1464640.904	598441.644
SU4-159-224	02/08/2006	Thorium-230	2.8	1.110	0.100			1464640.904	598441.644
SU4-159-224	02/08/2006	Thorium-232	2.1	1.270	0.090		J	1464640.904	598441.644
SU4-159-225	02/08/2006	Plutonium-238	55	0.260	0.060			1464655.904	598441.644
SU4-159-225	02/08/2006	Plutonium-239/240	62	0.050	0.050	U	UJ	1464655.904	598441.644
SU4-159-225	02/08/2006	Thorium-228	2.6	1.510	0.100		J	1464655.904	598441.644
SU4-159-225	02/08/2006	Thorium-230	2.8	1.160	0.040			1464655.904	598441.644
SU4-159-225	02/08/2006	Thorium-232	2.1	1.190	0.040		J	1464655.904	598441.644
SU4-159-226	02/08/2006	Plutonium-238	55	5.300	0.050			1464670.904	598441.644
SU4-159-226	02/08/2006	Plutonium-239/240	62	0.046	0.046	U	UJ	1464670.904	598441.644
SU4-159-226	02/08/2006	Thorium-228	2.6	1.270	0.070		J	1464670.904	598441.644
SU4-159-226	02/08/2006	Thorium-230	2.8	1.050	0.050			1464670.904	598441.644
SU4-159-226	02/08/2006	Thorium-232	2.1	1.260	0.080		J	1464670.904	598441.644
SU4-159-227	02/08/2006	Plutonium-238	55	3.200	0.050			1464685.904	598441.644
SU4-159-227	02/08/2006	Plutonium-239/240	62	0.052	0.052	U	UJ	1464685.904	598441.644
SU4-159-227	02/08/2006	Thorium-228	2.6	1.340	0.140		J	1464685.904	598441.644
SU4-159-227	02/08/2006	Thorium-230	2.8	1.270	0.100			1464685.904	598441.644
SU4-159-227	02/08/2006	Thorium-232	2.1	1.080	0.060		J	1464685.904	598441.644
SU4-159-228	02/08/2006	Plutonium-238	55	2.570	0.060			1464700.904	598441.644
SU4-159-228	02/08/2006	Plutonium-239/240	62	0.046	0.046	U	UJ	1464700.904	598441.644
SU4-159-228	02/08/2006	Thorium-228	2.6	1.280	0.130		J	1464700.904	598441.644
SU4-159-228	02/08/2006	Thorium-230	2.8	1.160	0.040			1464700.904	598441.644
SU4-159-228	02/08/2006	Thorium-232	2.1	1.320	0.070		J	1464700.904	598441.644
SU4-159-230	02/08/2006	Plutonium-238	55	2.220	0.080			1464633.404	598454.634
SU4-159-230	02/08/2006	Plutonium-239/240	62	0.045	0.040	J	J	1464633.404	598454.634
SU4-159-230	02/08/2006	Thorium-228	2.6	1.100	0.120		J	1464633.404	598454.634
SU4-159-230	02/08/2006	Thorium-230	2.8	1.310	0.120			1464633.404	598454.634
SU4-159-230	02/08/2006	Thorium-232	2.1	1.050	0.060		J	1464633.404	598454.634
SU4-159-231	02/08/2006	Plutonium-238	55	0.233	0.046			1464648.404	598454.634
SU4-159-231	02/08/2006	Plutonium-239/240	62	0.046	0.046	U	UJ	1464648.404	598454.634
SU4-159-231	02/08/2006	Thorium-228	2.6	1.170	0.180		J	1464648.404	598454.634
SU4-159-231	02/08/2006	Thorium-230	2.8	0.930	0.130			1464648.404	598454.634
SU4-159-231	02/08/2006	Thorium-232	2.1	1.180	0.070		J	1464648.404	598454.634
SU4-159-232	02/08/2006	Plutonium-238	55	0.110	0.079	J	J	1464663.404	598454.634
SU4-159-232	02/08/2006	Plutonium-239/240	62	0.041	0.041	U	UJ	1464663.404	598454.634
SU4-159-232	02/08/2006	Thorium-228	2.6	1.150	0.120		J	1464663.404	598454.634
SU4-159-232	02/08/2006	Thorium-230	2.8	1.440	0.100			1464663.404	598454.634

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU4-159-232	02/08/2006	Thorium-232	2.1	1.290	0.120		J	1464663.404	598454.634
SU4-159-233	02/08/2006	Plutonium-238	55	1.880	0.060		J	1464678.404	598454.634
SU4-159-233	02/08/2006	Plutonium-239/240	62	0.049	0.049	U	UJ	1464678.404	598454.634
SU4-159-233	02/08/2006	Thorium-228	2.6	0.930	0.130			1464678.404	598454.634
SU4-159-233	02/08/2006	Thorium-230	2.8	0.960	0.110			1464678.404	598454.634
SU4-159-233	02/08/2006	Thorium-232	2.1	0.880	0.090			1464678.404	598454.634
SU4-159-234	02/08/2006	Plutonium-238	55	5.480	0.080		J	1464693.404	598454.634
SU4-159-234	02/08/2006	Plutonium-239/240	62	0.068	0.050	J	J	1464693.404	598454.634
SU4-159-234	02/08/2006	Thorium-228	2.6	1.290	0.240			1464693.404	598454.634
SU4-159-234	02/08/2006	Thorium-230	2.8	1.050	0.190			1464693.404	598454.634
SU4-159-234	02/08/2006	Thorium-232	2.1	1.040	0.130			1464693.404	598454.634
SU4-159-235	02/08/2006	Plutonium-238	55	3.350	0.090		J	1464708.404	598454.634
SU4-159-235	02/08/2006	Plutonium-239/240	62	0.043	0.043	U	UJ	1464708.404	598454.634
SU4-159-235	02/08/2006	Thorium-228	2.6	1.090	0.160			1464708.404	598454.634
SU4-159-235	02/08/2006	Thorium-230	2.8	1.010	0.080			1464708.404	598454.634
SU4-159-235	02/08/2006	Thorium-232	2.1	1.170	0.080			1464708.404	598454.634
SU4-159-236	02/08/2006	Plutonium-238	55	0.270	0.080		J	1464723.404	598454.634
SU4-159-236	02/08/2006	Plutonium-239/240	62	0.051	0.051	U	UJ	1464723.404	598454.634
SU4-159-236	02/08/2006	Thorium-228	2.6	1.010	0.150			1464723.404	598454.634
SU4-159-236	02/08/2006	Thorium-230	2.8	0.670	0.110			1464723.404	598454.634
SU4-159-236	02/08/2006	Thorium-232	2.1	0.960	0.100			1464723.404	598454.634
SU4-159-237	02/08/2006	Plutonium-238	55	0.430	0.090		J	1464625.904	598467.625
SU4-159-237	02/08/2006	Plutonium-239/240	62	0.072	0.072	U	UJ	1464625.904	598467.625
SU4-159-237	02/08/2006	Thorium-228	2.6	1.150	0.230			1464625.904	598467.625
SU4-159-237	02/08/2006	Thorium-230	2.8	1.160	0.140			1464625.904	598467.625
SU4-159-237	02/08/2006	Thorium-232	2.1	0.990	0.200			1464625.904	598467.625
SU4-159-238	02/08/2006	Plutonium-238	55	1.470	0.070		J	1464640.904	598467.625
SU4-159-238	02/08/2006	Plutonium-239/240	62	0.065	0.065	U	UJ	1464640.904	598467.625
SU4-159-238	02/08/2006	Thorium-228	2.6	0.870	0.150			1464640.904	598467.625
SU4-159-238	02/08/2006	Thorium-230	2.8	1.060	0.130			1464640.904	598467.625
SU4-159-238	02/08/2006	Thorium-232	2.1	1.400	0.160			1464640.904	598467.625
SU4-159-239	02/08/2006	Plutonium-238	55	13.600	0.100		J	1464655.904	598467.625
SU4-159-239	02/08/2006	Plutonium-239/240	62	0.128	0.079	J	J	1464655.904	598467.625
SU4-159-239	02/08/2006	Thorium-228	2.6	1.410	0.170			1464655.904	598467.625
SU4-159-239	02/08/2006	Thorium-230	2.8	0.830	0.120			1464655.904	598467.625
SU4-159-239	02/08/2006	Thorium-232	2.1	1.160	0.160			1464655.904	598467.625
SU4-159-240	02/08/2006	Plutonium-238	55	0.093	0.057	J	J	1464670.904	598467.625
SU4-159-240	02/08/2006	Plutonium-239/240	62	0.057	0.057	U	UJ	1464670.904	598467.625
SU4-159-240	02/08/2006	Thorium-228	2.6	1.330	0.150			1464670.904	598467.625
SU4-159-240	02/08/2006	Thorium-230	2.8	0.940	0.100			1464670.904	598467.625
SU4-159-240	02/08/2006	Thorium-232	2.1	1.420	0.130			1464670.904	598467.625
SU4-159-240D	02/08/2006	Plutonium-238	55	0.085	0.085	U	UJ	1464670.904	598467.625
SU4-159-240D	02/08/2006	Plutonium-239/240	62	0.053	0.053	U	UJ	1464670.904	598467.625
SU4-159-240D	02/08/2006	Thorium-228	2.6	1.120	0.220			1464670.904	598467.625
SU4-159-240D	02/08/2006	Thorium-230	2.8	0.910	0.100			1464670.904	598467.625
SU4-159-240D	02/08/2006	Thorium-232	2.1	1.290	0.150			1464670.904	598467.625
SU4-159-241	02/08/2006	Plutonium-238	55	11.600	0.090		J	1464685.904	598467.625
SU4-159-241	02/08/2006	Plutonium-239/240	62	0.090	0.027	J	J	1464685.904	598467.625
SU4-159-241	02/08/2006	Thorium-228	2.6	1.210	0.230			1464685.904	598467.625
SU4-159-241	02/08/2006	Thorium-230	2.8	1.030	0.130			1464685.904	598467.625
SU4-159-241	02/08/2006	Thorium-232	2.1	1.020	0.130			1464685.904	598467.625
SU4-159-242	02/08/2006	Plutonium-238	55	28.100	0.020		J	1464700.904	598467.625
SU4-159-242	02/08/2006	Plutonium-239/240	62	0.196	0.038	J	J	1464700.904	598467.625
SU4-159-242	02/08/2006	Thorium-228	2.6	1.010	0.060			1464700.904	598467.625
SU4-159-242	02/08/2006	Thorium-230	2.8	0.660	0.100			1464700.904	598467.625
SU4-159-242	02/08/2006	Thorium-232	2.1	0.910	0.110			1464700.904	598467.625
SU4-159-243	02/08/2006	Plutonium-238	55	0.019	0.019	U	UJ	1464715.904	598467.625
SU4-159-243	02/08/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464715.904	598467.625
SU4-159-243	02/08/2006	Thorium-228	2.6	0.950	0.150			1464715.904	598467.625
SU4-159-243	02/08/2006	Thorium-230	2.8	0.780	0.090		J	1464715.904	598467.625
SU4-159-243	02/08/2006	Thorium-232	2.1	0.970	0.120		J	1464715.904	598467.625

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU4-159-244	02/08/2006	Plutonium-238	55	0.920	0.020			1464633.404	598480.615
SU4-159-244	02/08/2006	Plutonium-239/240	62	0.028	0.010	J	J	1464633.404	598480.615
SU4-159-244	02/08/2006	Thorium-228	2.6	1.170	0.090			1464633.404	598480.615
SU4-159-244	02/08/2006	Thorium-230	2.8	0.950	0.050			1464633.404	598480.615
SU4-159-244	02/08/2006	Thorium-232	2.1	1.170	0.030		J	1464633.404	598480.615
SU4-159-245	02/08/2006	Plutonium-238	55	0.216	0.025			1464648.404	598480.615
SU4-159-245	02/08/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464648.404	598480.615
SU4-159-245	02/08/2006	Thorium-228	2.6	1.000	0.090			1464648.404	598480.615
SU4-159-245	02/08/2006	Thorium-230	2.8	0.810	0.070			1464648.404	598480.615
SU4-159-245	02/08/2006	Thorium-232	2.1	1.220	0.070		J	1464648.404	598480.615
SU4-159-246	02/08/2006	Plutonium-238	55	0.305	0.029			1464663.404	598480.615
SU4-159-246	02/08/2006	Plutonium-239/240	62	0.018	0.018	U	UJ	1464663.404	598480.615
SU4-159-246	02/08/2006	Thorium-228	2.6	1.380	0.120			1464663.404	598480.615
SU4-159-246	02/08/2006	Thorium-230	2.8	1.010	0.090			1464663.404	598480.615
SU4-159-246	02/08/2006	Thorium-232	2.1	0.960	0.080		J	1464663.404	598480.615
SU4-159-247	02/08/2006	Plutonium-238	55	0.244	0.019			1464678.404	598480.615
SU4-159-247	02/08/2006	Plutonium-239/240	62	0.016	0.016	U	UJ	1464678.404	598480.615
SU4-159-247	02/08/2006	Thorium-228	2.6	1.190	0.150			1464678.404	598480.615
SU4-159-247	02/08/2006	Thorium-230	2.8	0.680	0.110			1464678.404	598480.615
SU4-159-247	02/08/2006	Thorium-232	2.1	1.110	0.090		J	1464678.404	598480.615
SU4-159-248	02/08/2006	Plutonium-238	55	0.072	0.026	J	J	1464693.404	598480.615
SU4-159-248	02/08/2006	Plutonium-239/240	62	0.025	0.025	U	UJ	1464693.404	598480.615
SU4-159-248	02/08/2006	Thorium-228	2.6	1.100	0.090			1464693.404	598480.615
SU4-159-248	02/08/2006	Thorium-230	2.8	0.960	0.060			1464693.404	598480.615
SU4-159-248	02/08/2006	Thorium-232	2.1	1.310	0.040		J	1464693.404	598480.615
SU4-159-249	02/08/2006	Plutonium-238	55	1.320	0.020			1464708.404	598480.615
SU4-159-249	02/08/2006	Plutonium-239/240	62	0.031	0.009	J	J	1464708.404	598480.615
SU4-159-249	02/08/2006	Thorium-228	2.6	1.040	0.100			1464708.404	598480.615
SU4-159-249	02/08/2006	Thorium-230	2.8	0.780	0.070			1464708.404	598480.615
SU4-159-249	02/08/2006	Thorium-232	2.1	0.850	0.060		J	1464708.404	598480.615
SU4-159-250	02/08/2006	Plutonium-238	55	0.026	0.026	U	UJ	1464723.404	598480.615
SU4-159-250	02/08/2006	Plutonium-239/240	62	0.021	0.021	U	UJ	1464723.404	598480.615
SU4-159-250	02/08/2006	Thorium-228	2.6	1.350	0.110			1464723.404	598480.615
SU4-159-250	02/08/2006	Thorium-230	2.8	0.960	0.090			1464723.404	598480.615
SU4-159-250	02/08/2006	Thorium-232	2.1	1.110	0.090		J	1464723.404	598480.615
SU4-159-251	02/08/2006	Plutonium-238	55	7.660	0.040			1464625.904	598493.606
SU4-159-251	02/08/2006	Plutonium-239/240	62	0.128	0.038			1464625.904	598493.606
SU4-159-251	02/08/2006	Thorium-228	2.6	1.260	0.090			1464625.904	598493.606
SU4-159-251	02/08/2006	Thorium-230	2.8	1.020	0.060			1464625.904	598493.606
SU4-159-251	02/08/2006	Thorium-232	2.1	1.420	0.040		J	1464625.904	598493.606
SU4-159-252	02/08/2006	Plutonium-238	55	0.450	0.037			1464640.904	598493.606
SU4-159-252	02/08/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464640.904	598493.606
SU4-159-252	02/08/2006	Thorium-228	2.6	1.000	0.060			1464640.904	598493.606
SU4-159-252	02/08/2006	Thorium-230	2.8	0.800	0.050			1464640.904	598493.606
SU4-159-252	02/08/2006	Thorium-232	2.1	0.770	0.050		J	1464640.904	598493.606
SU4-159-253	02/08/2006	Plutonium-238	55	0.159	0.041			1464655.904	598493.606
SU4-159-253	02/08/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464655.904	598493.606
SU4-159-253	02/08/2006	Thorium-228	2.6	1.170	0.070			1464655.904	598493.606
SU4-159-253	02/08/2006	Thorium-230	2.8	0.880	0.080			1464655.904	598493.606
SU4-159-253	02/08/2006	Thorium-232	2.1	1.410	0.080		J	1464655.904	598493.606
SU4-159-254	02/08/2006	Plutonium-238	55	1.520	0.030			1464670.904	598493.606
SU4-159-254	02/08/2006	Plutonium-239/240	62	0.030	0.021	J	J	1464670.904	598493.606
SU4-159-254	02/08/2006	Thorium-228	2.6	1.080	0.120			1464670.904	598493.606
SU4-159-254	02/08/2006	Thorium-230	2.8	0.690	0.100			1464670.904	598493.606
SU4-159-254	02/08/2006	Thorium-232	2.1	0.940	0.040		J	1464670.904	598493.606
SU4-159-255	02/08/2006	Plutonium-238	55	2.580	0.040			1464685.904	598493.606
SU4-159-255	02/08/2006	Plutonium-239/240	62	0.044	0.034	J	J	1464685.904	598493.606
SU4-159-255	02/08/2006	Thorium-228	2.6	0.890	0.060			1464685.904	598493.606
SU4-159-255	02/08/2006	Thorium-230	2.8	0.700	0.070			1464685.904	598493.606
SU4-159-255	02/08/2006	Thorium-232	2.1	0.950	0.060		J	1464685.904	598493.606
SU4-159-256	02/08/2006	Plutonium-238	55	1.440	0.030			1464700.904	598493.606

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU4-159-256	02/08/2006	Plutonium-239/240	62	0.029	0.029	U	UJ	1464700.904	598493.606
SU4-159-256	02/08/2006	Thorium-228	2.6	1.180	0.120			1464700.904	598493.606
SU4-159-256	02/08/2006	Thorium-230	2.8	0.970	0.040			1464700.904	598493.606
SU4-159-256	02/08/2006	Thorium-232	2.1	1.280	0.070		J	1464700.904	598493.606
SU4-159-257	02/08/2006	Plutonium-238	55	3.910	0.050			1464715.904	598493.606
SU4-159-257	02/08/2006	Plutonium-239/240	62	0.037	0.036	J	J	1464715.904	598493.606
SU4-159-257	02/08/2006	Thorium-228	2.6	1.130	0.080			1464715.904	598493.606
SU4-159-257	02/08/2006	Thorium-230	2.8	0.950	0.070			1464715.904	598493.606
SU4-159-257	02/08/2006	Thorium-232	2.1	1.040	0.070		J	1464715.904	598493.606
SU4-159-258	02/08/2006	Plutonium-238	55	1.850	0.040			1464618.404	598506.596
SU4-159-258	02/08/2006	Plutonium-239/240	62	0.022	0.012	J	J	1464618.404	598506.596
SU4-159-258	02/08/2006	Thorium-228	2.6	1.370	0.050			1464618.404	598506.596
SU4-159-258	02/08/2006	Thorium-230	2.8	1.010	0.020			1464618.404	598506.596
SU4-159-258	02/08/2006	Thorium-232	2.1	1.410	0.030			1464618.404	598506.596
SU4-159-259	02/08/2006	Plutonium-238	55	2.090	0.010			1464633.404	598506.596
SU4-159-259	02/08/2006	Plutonium-239/240	62	0.032	0.018	J	J	1464633.404	598506.596
SU4-159-259	02/08/2006	Thorium-228	2.6	1.010	0.060			1464633.404	598506.596
SU4-159-259	02/08/2006	Thorium-230	2.8	0.930	0.050			1464633.404	598506.596
SU4-159-259	02/08/2006	Thorium-232	2.1	1.100	0.030			1464633.404	598506.596
SU4-159-260	02/08/2006	Plutonium-238	55	0.337	0.027			1464648.404	598506.596
SU4-159-260	02/08/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464648.404	598506.596
SU4-159-260	02/08/2006	Thorium-228	2.6	1.170	0.060			1464648.404	598506.596
SU4-159-260	02/08/2006	Thorium-230	2.8	0.960	0.030			1464648.404	598506.596
SU4-159-260	02/08/2006	Thorium-232	2.1	1.240	0.030			1464648.404	598506.596
SU4-159-261	02/08/2006	Plutonium-238	55	0.610	0.040			1464663.404	598506.596
SU4-159-261	02/08/2006	Plutonium-239/240	62	0.025	0.024	J	J	1464663.404	598506.596
SU4-159-261	02/08/2006	Thorium-228	2.6	1.070	0.080			1464663.404	598506.596
SU4-159-261	02/08/2006	Thorium-230	2.8	0.910	0.040			1464663.404	598506.596
SU4-159-261	02/08/2006	Thorium-232	2.1	1.070	0.020			1464663.404	598506.596
SU4-159-262	02/08/2006	Plutonium-238	55	1.360	0.040			1464678.404	598506.596
SU4-159-262	02/08/2006	Plutonium-239/240	62	0.024	0.024	J	J	1464678.404	598506.596
SU4-159-262	02/08/2006	Thorium-228	2.6	1.630	0.070			1464678.404	598506.596
SU4-159-262	02/08/2006	Thorium-230	2.8	1.150	0.060			1464678.404	598506.596
SU4-159-262	02/08/2006	Thorium-232	2.1	1.380	0.050			1464678.404	598506.596
SU4-159-263	02/08/2006	Plutonium-238	55	2.410	0.040		J	1464693.404	598506.596
SU4-159-263	02/08/2006	Plutonium-239/240	62	0.023	0.023	U	U	1464693.404	598506.596
SU4-159-263	02/08/2006	Thorium-228	2.6	0.890	0.070			1464693.404	598506.596
SU4-159-263	02/08/2006	Thorium-230	2.8	0.800	0.060			1464693.404	598506.596
SU4-159-263	02/08/2006	Thorium-232	2.1	0.800	0.040			1464693.404	598506.596
SU4-159-264	02/08/2006	Plutonium-238	55	0.239	0.040			1464708.404	598506.596
SU4-159-264	02/08/2006	Plutonium-239/240	62	0.035	0.035	U	UJ	1464708.404	598506.596
SU4-159-264	02/08/2006	Thorium-228	2.6	1.050	0.060			1464708.404	598506.596
SU4-159-264	02/08/2006	Thorium-230	2.8	0.820	0.040			1464708.404	598506.596
SU4-159-264	02/08/2006	Thorium-232	2.1	0.880	0.070			1464708.404	598506.596
SU4-159-265	02/08/2006	Plutonium-238	55	7.640	0.040			1464723.404	598506.596
SU4-159-265	02/08/2006	Plutonium-239/240	62	0.042	0.011	J	J	1464723.404	598506.596
SU4-159-265	02/08/2006	Thorium-228	2.6	0.690	0.150			1464723.404	598506.596
SU4-159-265	02/08/2006	Thorium-230	2.8	0.940	0.050			1464723.404	598506.596
SU4-159-265	02/08/2006	Thorium-232	2.1	0.900	0.080			1464723.404	598506.596
SU4-159-266	02/08/2006	Plutonium-238	55	2.850	0.040			1464625.904	598519.586
SU4-159-266	02/08/2006	Plutonium-239/240	62	0.029	0.029	U	UJ	1464625.904	598519.586
SU4-159-266	02/08/2006	Thorium-228	2.6	1.000	0.080			1464625.904	598519.586
SU4-159-266	02/08/2006	Thorium-230	2.8	0.920	0.080			1464625.904	598519.586
SU4-159-266	02/08/2006	Thorium-232	2.1	0.710	0.040		J	1464625.904	598519.586
SU4-159-266D	02/08/2006	Plutonium-238	55	3.350	0.040			1464625.904	598519.586
SU4-159-266D	02/08/2006	Plutonium-239/240	62	0.046	0.030	J	J	1464625.904	598519.586
SU4-159-266D	02/08/2006	Thorium-228	2.6	1.060	0.180			1464625.904	598519.586
SU4-159-266D	02/08/2006	Thorium-230	2.8	1.190	0.140			1464625.904	598519.586
SU4-159-266D	02/08/2006	Thorium-232	2.1	1.050	0.070		J	1464625.904	598519.586
SU4-159-267	02/08/2006	Plutonium-238	55	1.310	0.040			1464640.904	598519.586
SU4-159-267	02/08/2006	Plutonium-239/240	62	0.037	0.022	J	J	1464640.904	598519.586

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU4-159-267	02/08/2006	Thorium-228	2.6	1.490	0.130			1464640.904	598519.586
SU4-159-267	02/08/2006	Thorium-230	2.8	0.890	0.110			1464640.904	598519.586
SU4-159-267	02/08/2006	Thorium-232	2.1	0.900	0.130			1464640.904	598519.586
SU4-159-268	02/08/2006	Plutonium-238	55	12.700	0.040			1464655.904	598519.586
SU4-159-268	02/08/2006	Plutonium-239/240	62	0.133	0.028			1464655.904	598519.586
SU4-159-268	02/08/2006	Thorium-228	2.6	0.590	0.110			1464655.904	598519.586
SU4-159-268	02/08/2006	Thorium-230	2.8	0.620	0.100			1464655.904	598519.586
SU4-159-268	02/08/2006	Thorium-232	2.1	0.780	0.060			1464655.904	598519.586
SU4-159-269	03/28/2006	Plutonium-238	55	1.610	0.080			1464670.904	598519.586
SU4-159-269	03/28/2006	Plutonium-239/240	62	0.046	0.046	U	UJ	1464670.904	598519.586
SU4-159-269	03/28/2006	Thorium-228	2.6	1.160	0.070			1464670.904	598519.586
SU4-159-269	03/28/2006	Thorium-230	2.8	0.780	0.030			1464670.904	598519.586
SU4-159-269	03/28/2006	Thorium-232	2.1	0.950	0.040			1464670.904	598519.586
SU4-159-270	02/08/2006	Plutonium-238	55	3.730	0.030			1464685.904	598519.586
SU4-159-270	02/08/2006	Plutonium-239/240	62	0.024	0.018	J	J	1464685.904	598519.586
SU4-159-270	02/08/2006	Thorium-228	2.6	0.870	0.050			1464685.904	598519.586
SU4-159-270	02/08/2006	Thorium-230	2.8	0.830	0.050			1464685.904	598519.586
SU4-159-270	02/08/2006	Thorium-232	2.1	0.850	0.040			1464685.904	598519.586
SU4-159-271	02/08/2006	Plutonium-238	55	2.530	0.030			1464700.904	598519.586
SU4-159-271	02/08/2006	Plutonium-239/240	62	0.040	0.021	J	J	1464700.904	598519.586
SU4-159-271	02/08/2006	Thorium-228	2.6	0.220	0.080			1464700.904	598519.586
SU4-159-271	02/08/2006	Thorium-230	2.8	0.680	0.030			1464700.904	598519.586
SU4-159-271	02/08/2006	Thorium-232	2.1	0.390	0.030			1464700.904	598519.586
SU4-159-272	02/08/2006	Plutonium-238	55	5.870	0.030			1464715.904	598519.586
SU4-159-272	02/08/2006	Plutonium-239/240	62	0.094	0.021	J	J	1464715.904	598519.586
SU4-159-272	02/08/2006	Thorium-228	2.6	0.800	0.030			1464715.904	598519.586
SU4-159-272	02/08/2006	Thorium-230	2.8	0.690	0.030			1464715.904	598519.586
SU4-159-272	02/08/2006	Thorium-232	2.1	0.890	0.020			1464715.904	598519.586
SU4-159-325	02/09/2006	Plutonium-238	55	0.087	0.068	J	J	1464728.895	598415.663
SU4-159-325	02/09/2006	Plutonium-239/240	62	0.049	0.049	U	UJ	1464728.895	598415.663
SU4-159-325	02/09/2006	Thorium-228	2.6	0.420	0.070			1464728.895	598415.663
SU4-159-325	02/09/2006	Thorium-230	2.8	0.870	0.040			1464728.895	598415.663
SU4-159-325	02/09/2006	Thorium-232	2.1	0.370	0.030			1464728.895	598415.663
SU4-159-326	02/09/2006	Plutonium-238	55	0.160	0.110	J	J	1464378.678	598448.113
SU4-159-326	02/09/2006	Plutonium-239/240	62	0.069	0.069	U	UJ	1464378.678	598448.113
SU4-159-326	02/09/2006	Thorium-228	2.6	1.100	0.070			1464378.678	598448.113
SU4-159-326	02/09/2006	Thorium-230	2.8	0.820	0.050			1464378.678	598448.113
SU4-159-326	02/09/2006	Thorium-232	2.1	0.840	0.030			1464378.678	598448.113
SU5-159-273	02/15/2006	Actinium-227	4.6	0.180	0.180	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Actinium-228	1.93	0.240	0.150			1464516.863	598266.114
SU5-159-273	02/15/2006	Americium-241	63	0.065	0.065	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Bismuth-207	1.2	0.032	0.032	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Bismuth-210M	8.3	0.040	0.040	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Bismuth-214	1.17	0.340	0.070			1464516.863	598266.114
SU5-159-273	02/15/2006	Cesium-137	3.8	0.046	0.046	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Cobalt-60	0.7	0.057	0.057	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Lead-210	7.4	0.860	0.860	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Lead-212	16.6	0.307	0.052			1464516.863	598266.114
SU5-159-273	02/15/2006	Lead-214	8.9	0.390	0.064			1464516.863	598266.114
SU5-159-273	02/15/2006	Plutonium-238	55	2.140	0.040			1464516.863	598266.114
SU5-159-273	02/15/2006	Plutonium-239/240	62	0.038	0.038	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Potassium-40	47.8	6.800	0.300			1464516.863	598266.114
SU5-159-273	02/15/2006	Protactinium-231	4	0.770	0.770	U	UJ	1464516.863	598266.114
SU5-159-273	02/15/2006	Radium-226	2.9	0.340	0.070	J	J	1464516.863	598266.114
SU5-159-273	02/15/2006	Radium-228	2.1	0.240	0.150			1464516.863	598266.114
SU5-159-273	02/15/2006	Thallium-208	0.498	0.059	0.039			1464516.863	598266.114
SU5-159-273	02/15/2006	Thorium-228	2.6	0.490	0.050			1464516.863	598266.114
SU5-159-273	02/15/2006	Thorium-230	2.8	0.790	0.020			1464516.863	598266.114
SU5-159-273	02/15/2006	Thorium-232	2.1	0.430	0.010			1464516.863	598266.114
SU5-159-274	02/15/2006	Actinium-227	4.6	0.350	0.350	U	UJ	1464494.363	598279.104
SU5-159-274	02/15/2006	Actinium-228	1.93	0.770	0.220			1464494.363	598279.104

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-274	02/15/2006	Americium-241	63	0.150	0.150	U	U	1464494.363	598279.104
SU5-159-274	02/15/2006	Bismuth-207	1.2	0.058	0.058	U	UJ	1464494.363	598279.104
SU5-159-274	02/15/2006	Bismuth-210M	8.3	0.074	0.074	U	UJ	1464494.363	598279.104
SU5-159-274	02/15/2006	Cesium-137	3.8	0.073	0.073	U	UJ	1464494.363	598279.104
SU5-159-274	02/15/2006	Cobalt-60	0.7	0.090	0.090	U	UJ	1464494.363	598279.104
SU5-159-274	02/15/2006	Lead-210	7.4	1.500	1.500	U	UJ	1464494.363	598279.104
SU5-159-274	02/15/2006	Lead-212	16.6	0.660	0.140			1464494.363	598279.104
SU5-159-274	02/15/2006	Lead-214	8.9	0.610	0.120			1464494.363	598279.104
SU5-159-274	02/15/2006	Plutonium-238	55	1.170	0.040			1464494.363	598279.104
SU5-159-274	02/15/2006	Plutonium-239/240	62	0.036	0.036	U	UJ	1464494.363	598279.104
SU5-159-274	02/15/2006	Potassium-40	47.8	20.400	0.700			1464494.363	598279.104
SU5-159-274	02/15/2006	Protactinium-231	4	1.300	1.300	U	U	1464494.363	598279.104
SU5-159-274	02/15/2006	Radium-226	2.9	0.510	0.280	J	J	1464494.363	598279.104
SU5-159-274	02/15/2006	Radium-228	2.1	0.770	0.220			1464494.363	598279.104
SU5-159-274	02/15/2006	Thallium-208	0.498	0.301	0.065			1464494.363	598279.104
SU5-159-274	02/15/2006	Thorium-228	2.6	1.120	0.040			1464494.363	598279.104
SU5-159-274	02/15/2006	Thorium-230	2.8	0.960	0.040			1464494.363	598279.104
SU5-159-274	02/15/2006	Thorium-232	2.1	1.120	0.040			1464494.363	598279.104
SU5-159-275	02/15/2006	Actinium-227	4.6	0.530	0.330	J	J	1464524.363	598279.104
SU5-159-275	02/15/2006	Americium-241	63	0.099	0.099	U	UJ	1464524.363	598279.104
SU5-159-275	02/15/2006	Bismuth-207	1.2	0.039	0.039	U	UJ	1464524.363	598279.104
SU5-159-275	02/15/2006	Bismuth-210M	8.3	0.057	0.057	U	UJ	1464524.363	598279.104
SU5-159-275	02/15/2006	Cesium-137	3.8	0.050	0.050	U	UJ	1464524.363	598279.104
SU5-159-275	02/15/2006	Cobalt-60	0.7	0.055	0.055	U	UJ	1464524.363	598279.104
SU5-159-275	02/15/2006	Lead-210	7.4	1.300	1.300	U	UJ	1464524.363	598279.104
SU5-159-275	02/15/2006	Lead-212	16.6	0.236	0.086			1464524.363	598279.104
SU5-159-275	02/15/2006	Lead-214	8.9	0.351	0.078			1464524.363	598279.104
SU5-159-275	02/15/2006	Plutonium-238	55	8.510	0.030			1464524.363	598279.104
SU5-159-275	02/15/2006	Plutonium-239/240	62	0.102	0.011			1464524.363	598279.104
SU5-159-275	02/15/2006	Potassium-40	47.8	6.400	0.500			1464524.363	598279.104
SU5-159-275	02/15/2006	Protactinium-231	4	1.100	1.100	U	U	1464524.363	598279.104
SU5-159-275	02/15/2006	Radium-226	2.9	0.350	0.180	J	J	1464524.363	598279.104
SU5-159-275	02/15/2006	Radium-228	2.1	0.260	0.260	U	U	1464524.363	598279.104
SU5-159-275	02/15/2006	Thallium-208	0.498	0.124	0.040			1464524.363	598279.104
SU5-159-275	02/15/2006	Thorium-228	2.6	0.510	0.030			1464524.363	598279.104
SU5-159-275	02/15/2006	Thorium-230	2.8	0.860	0.030			1464524.363	598279.104
SU5-159-275	02/15/2006	Thorium-232	2.1	0.430	0.020			1464524.363	598279.104
SU5-159-276	02/15/2006	Actinium-227	4.6	0.210	0.210	U	UJ	1464539.363	598279.104
SU5-159-276	02/15/2006	Americium-241	63	0.079	0.079	U	UJ	1464539.363	598279.104
SU5-159-276	02/15/2006	Bismuth-207	1.2	0.036	0.036	U	UJ	1464539.363	598279.104
SU5-159-276	02/15/2006	Bismuth-210M	8.3	0.050	0.050	U	UJ	1464539.363	598279.104
SU5-159-276	02/15/2006	Cesium-137	3.8	0.068	0.068	U	U	1464539.363	598279.104
SU5-159-276	02/15/2006	Cobalt-60	0.7	0.067	0.067	U	UJ	1464539.363	598279.104
SU5-159-276	02/15/2006	Lead-210	7.4	1.200	1.200	U	UJ	1464539.363	598279.104
SU5-159-276	02/15/2006	Lead-212	16.6	0.275	0.078			1464539.363	598279.104
SU5-159-276	02/15/2006	Lead-214	8.9	0.380	0.080			1464539.363	598279.104
SU5-159-276	02/15/2006	Plutonium-238	55	2.380	0.040			1464539.363	598279.104
SU5-159-276	02/15/2006	Plutonium-239/240	62	0.030	0.030	U	U	1464539.363	598279.104
SU5-159-276	02/15/2006	Potassium-40	47.8	7.000	0.300			1464539.363	598279.104
SU5-159-276	02/15/2006	Protactinium-231	4	0.860	0.860	U	UJ	1464539.363	598279.104
SU5-159-276	02/15/2006	Radium-226	2.9	0.400	0.190	J	J	1464539.363	598279.104
SU5-159-276	02/15/2006	Radium-228	2.1	0.260	0.260			1464539.363	598279.104
SU5-159-276	02/15/2006	Thallium-208	0.498	0.138	0.048			1464539.363	598279.104
SU5-159-276	02/15/2006	Thorium-228	2.6	0.550	0.040			1464539.363	598279.104
SU5-159-276	02/15/2006	Thorium-230	2.8	0.930	0.030			1464539.363	598279.104
SU5-159-276	02/15/2006	Thorium-232	2.1	0.510	0.020			1464539.363	598279.104
SU5-159-277	02/15/2006	Actinium-227	4.6	0.390	0.390	U	UJ	1464501.863	598292.095
SU5-159-277	02/15/2006	Actinium-228	1.93	0.810	0.240			1464501.863	598292.095
SU5-159-277	02/15/2006	Americium-241	63	0.140	0.140	U	UJ	1464501.863	598292.095
SU5-159-277	02/15/2006	Bismuth-207	1.2	0.055	0.055	U	UJ	1464501.863	598292.095
SU5-159-277	02/15/2006	Bismuth-210M	8.3	0.075	0.075	U	UJ	1464501.863	598292.095

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-277	02/15/2006	Bismuth-212	9.87	1.100	0.970			1464501.863	598292.095
SU5-159-277	02/15/2006	Bismuth-214	1.17	0.560	0.130			1464501.863	598292.095
SU5-159-277	02/15/2006	Cesium-137	3.8	0.082	0.082	U	UJ	1464501.863	598292.095
SU5-159-277	02/15/2006	Cobalt-60	0.7	0.095	0.095	U	UJ	1464501.863	598292.095
SU5-159-277	02/15/2006	Lead-210	7.4	1.900	1.900	U	UJ	1464501.863	598292.095
SU5-159-277	02/15/2006	Lead-212	16.6	0.800	0.130			1464501.863	598292.095
SU5-159-277	02/15/2006	Lead-214	8.9	0.590	0.120			1464501.863	598292.095
SU5-159-277	02/15/2006	Plutonium-238	55	4.190	0.040			1464501.863	598292.095
SU5-159-277	02/15/2006	Plutonium-239/240	62	0.044	0.031	J	J	1464501.863	598292.095
SU5-159-277	02/15/2006	Potassium-40	47.8	28.200	0.600			1464501.863	598292.095
SU5-159-277	02/15/2006	Protactinium-231	4	1.400	1.400	U	UJ	1464501.863	598292.095
SU5-159-277	02/15/2006	Radium-226	2.9	0.560	0.130	J	J	1464501.863	598292.095
SU5-159-277	02/15/2006	Radium-228	2.1	0.810	0.240			1464501.863	598292.095
SU5-159-277	02/15/2006	Thallium-208	0.498	0.326	0.073			1464501.863	598292.095
SU5-159-277	02/15/2006	Thorium-228	2.6	1.020	0.040			1464501.863	598292.095
SU5-159-277	02/15/2006	Thorium-230	2.8	0.920	0.030			1464501.863	598292.095
SU5-159-277	02/15/2006	Thorium-232	2.1	1.100	0.020			1464501.863	598292.095
SU5-159-277D	02/15/2006	Actinium-227	4.6	0.260	0.260	U	UJ	1464501.863	598292.095
SU5-159-277D	02/15/2006	Actinium-228	1.93	0.900	0.210			1464501.863	598292.095
SU5-159-277D	02/15/2006	Americium-241	63	0.100	0.100	U	UJ	1464501.863	598292.095
SU5-159-277D	02/15/2006	Bismuth-207	1.2	0.045	0.045	U	UJ	1464501.863	598292.095
SU5-159-277D	02/15/2006	Bismuth-210M	8.3	0.053	0.053	U	U	1464501.863	598292.095
SU5-159-277D	02/15/2006	Cesium-137	3.8	0.061	0.061	U	UJ	1464501.863	598292.095
SU5-159-277D	02/15/2006	Cobalt-60	0.7	0.075	0.075	U	UJ	1464501.863	598292.095
SU5-159-277D	02/15/2006	Lead-210	7.4	1.100	1.100	U	UJ	1464501.863	598292.095
SU5-159-277D	02/15/2006	Lead-212	16.6	0.740	0.100			1464501.863	598292.095
SU5-159-277D	02/15/2006	Lead-214	8.9	0.440	0.100			1464501.863	598292.095
SU5-159-277D	02/15/2006	Plutonium-238	55	3.270	0.040			1464501.863	598292.095
SU5-159-277D	02/15/2006	Plutonium-239/240	62	0.041	0.024	J	J	1464501.863	598292.095
SU5-159-277D	02/15/2006	Potassium-40	47.8	23.500	0.500			1464501.863	598292.095
SU5-159-277D	02/15/2006	Protactinium-231	4	1.100	1.100	U	UJ	1464501.863	598292.095
SU5-159-277D	02/15/2006	Radium-226	2.9	0.540	0.220	J	J	1464501.863	598292.095
SU5-159-277D	02/15/2006	Radium-228	2.1	0.900	0.210			1464501.863	598292.095
SU5-159-277D	02/15/2006	Thallium-208	0.498	0.280	0.054			1464501.863	598292.095
SU5-159-277D	02/15/2006	Thorium-228	2.6	1.060	0.070			1464501.863	598292.095
SU5-159-277D	02/15/2006	Thorium-230	2.8	0.790	0.050			1464501.863	598292.095
SU5-159-277D	02/15/2006	Thorium-232	2.1	1.050	0.040			1464501.863	598292.095
SU5-159-278	02/15/2006	Actinium-227	4.6	0.300	0.300	U	UJ	1464531.863	598292.095
SU5-159-278	02/15/2006	Actinium-228	1.93	0.480	0.210			1464531.863	598292.095
SU5-159-278	02/15/2006	Americium-241	63	0.120	0.120	U	UJ	1464531.863	598292.095
SU5-159-278	02/15/2006	Bismuth-207	1.2	0.044	0.044	U	UJ	1464531.863	598292.095
SU5-159-278	02/15/2006	Bismuth-210M	8.3	0.050	0.050	U	UJ	1464531.863	598292.095
SU5-159-278	02/15/2006	Cesium-137	3.8	0.064	0.063	J	J	1464531.863	598292.095
SU5-159-278	02/15/2006	Cobalt-60	0.7	0.067	0.067	U	UJ	1464531.863	598292.095
SU5-159-278	02/15/2006	Lead-210	7.4	1.500	1.500	U	UJ	1464531.863	598292.095
SU5-159-278	02/15/2006	Lead-212	16.6	0.459	0.074			1464531.863	598292.095
SU5-159-278	02/15/2006	Lead-214	8.9	0.530	0.090			1464531.863	598292.095
SU5-159-278	02/15/2006	Plutonium-238	55	2.650	0.040			1464531.863	598292.095
SU5-159-278	02/15/2006	Plutonium-239/240	62	0.029	0.029	U	U	1464531.863	598292.095
SU5-159-278	02/15/2006	Potassium-40	47.8	12.400	0.600			1464531.863	598292.095
SU5-159-278	02/15/2006	Protactinium-231	4	1.200	1.200	U	U	1464531.863	598292.095
SU5-159-278	02/15/2006	Radium-226	2.9	0.470	0.240	J	J	1464531.863	598292.095
SU5-159-278	02/15/2006	Radium-228	2.1	0.480	0.210			1464531.863	598292.095
SU5-159-278	02/15/2006	Thallium-208	0.498	0.153	0.063			1464531.863	598292.095
SU5-159-278	02/15/2006	Thorium-228	2.6	0.660	0.040			1464531.863	598292.095
SU5-159-278	02/15/2006	Thorium-230	2.8	0.790	0.030			1464531.863	598292.095
SU5-159-278	02/15/2006	Thorium-232	2.1	0.650	0.030			1464531.863	598292.095
SU5-159-279	02/15/2006	Actinium-227	4.6	0.480	0.300	J	J	1464546.863	598292.095
SU5-159-279	02/15/2006	Actinium-228	1.93	0.280	0.180			1464546.863	598292.095
SU5-159-279	02/15/2006	Americium-241	63	0.100	0.100	U	UJ	1464546.863	598292.095
SU5-159-279	02/15/2006	Bismuth-207	1.2	0.040	0.040	U	UJ	1464546.863	598292.095

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-279	02/15/2006	Bismuth-210M	8.3	0.057	0.057	U	UJ	1464546.863	598292.095
SU5-159-279	02/15/2006	Bismuth-214	1.17	0.350	0.090			1464546.863	598292.095
SU5-159-279	02/15/2006	Cesium-137	3.8	0.164	0.051	J	J	1464546.863	598292.095
SU5-159-279	02/15/2006	Cobalt-60	0.7	0.050	0.050	U	UJ	1464546.863	598292.095
SU5-159-279	02/15/2006	Lead-210	7.4	1.300	1.300	U	UJ	1464546.863	598292.095
SU5-159-279	02/15/2006	Lead-212	16.6	0.264	0.068			1464546.863	598292.095
SU5-159-279	02/15/2006	Lead-214	8.9	0.380	0.090			1464546.863	598292.095
SU5-159-279	02/15/2006	Plutonium-238	55	6.210	0.030			1464546.863	598292.095
SU5-159-279	02/15/2006	Plutonium-239/240	62	0.064	0.028	J	J	1464546.863	598292.095
SU5-159-279	02/15/2006	Potassium-40	47.8	6.800	0.600			1464546.863	598292.095
SU5-159-279	02/15/2006	Protactinium-231	4	1.100	1.100	U	UJ	1464546.863	598292.095
SU5-159-279	02/15/2006	Radium-226	2.9	0.350	0.090	J	J	1464546.863	598292.095
SU5-159-279	02/15/2006	Radium-228	2.1	0.280	0.180			1464546.863	598292.095
SU5-159-279	02/15/2006	Thallium-208	0.498	0.111	0.045			1464546.863	598292.095
SU5-159-279	02/15/2006	Thorium-228	2.6	0.520	0.030			1464546.863	598292.095
SU5-159-279	02/15/2006	Thorium-230	2.8	0.980	0.020			1464546.863	598292.095
SU5-159-279	02/15/2006	Thorium-232	2.1	0.530	0.010			1464546.863	598292.095
SU5-159-280	02/15/2006	Actinium-227	4.6	0.240	0.240	U	UJ	1464509.363	598305.085
SU5-159-280	02/15/2006	Actinium-228	1.93	0.510	0.170			1464509.363	598305.085
SU5-159-280	02/15/2006	Americium-241	63	0.100	0.100	U	UJ	1464509.363	598305.085
SU5-159-280	02/15/2006	Bismuth-207	1.2	0.041	0.041	U	UJ	1464509.363	598305.085
SU5-159-280	02/15/2006	Bismuth-210M	8.3	0.058	0.058	U	UJ	1464509.363	598305.085
SU5-159-280	02/15/2006	Bismuth-212	9.87	0.780	0.710			1464509.363	598305.085
SU5-159-280	02/15/2006	Bismuth-214	1.17	0.520	0.090			1464509.363	598305.085
SU5-159-280	02/15/2006	Cesium-137	3.8	0.120	0.055	J	J	1464509.363	598305.085
SU5-159-280	02/15/2006	Cobalt-60	0.7	0.053	0.053	U	UJ	1464509.363	598305.085
SU5-159-280	02/15/2006	Lead-210	7.4	1.300	1.300	U	UJ	1464509.363	598305.085
SU5-159-280	02/15/2006	Lead-212	16.6	0.580	0.090			1464509.363	598305.085
SU5-159-280	02/15/2006	Lead-214	8.9	0.510	0.080			1464509.363	598305.085
SU5-159-280	02/15/2006	Plutonium-238	55	16.000	0.030			1464509.363	598305.085
SU5-159-280	02/15/2006	Plutonium-239/240	62	0.205	0.015			1464509.363	598305.085
SU5-159-280	02/15/2006	Potassium-40	47.8	16.600	0.600			1464509.363	598305.085
SU5-159-280	02/15/2006	Protactinium-231	4	0.980	0.980	U	UJ	1464509.363	598305.085
SU5-159-280	02/15/2006	Radium-226	2.9	0.520	0.090	J	J	1464509.363	598305.085
SU5-159-280	02/15/2006	Radium-228	2.1	0.510	0.170			1464509.363	598305.085
SU5-159-280	02/15/2006	Thallium-208	0.498	0.219	0.051			1464509.363	598305.085
SU5-159-280	02/15/2006	Thorium-228	2.6	1.050	0.040			1464509.363	598305.085
SU5-159-280	02/15/2006	Thorium-230	2.8	0.810	0.030			1464509.363	598305.085
SU5-159-280	02/15/2006	Thorium-232	2.1	0.830	0.030			1464509.363	598305.085
SU5-159-281	02/15/2006	Actinium-227	4.6	0.980	0.320	J	J	1464524.363	598305.085
SU5-159-281	02/15/2006	Actinium-228	1.93	0.700	0.180			1464524.363	598305.085
SU5-159-281	02/15/2006	Americium-241	63	0.095	0.095	U	UJ	1464524.363	598305.085
SU5-159-281	02/15/2006	Bismuth-207	1.2	0.034	0.034	U	UJ	1464524.363	598305.085
SU5-159-281	02/15/2006	Bismuth-210M	8.3	0.048	0.048	U	UJ	1464524.363	598305.085
SU5-159-281	02/15/2006	Bismuth-212	9.87	0.620	0.560			1464524.363	598305.085
SU5-159-281	02/15/2006	Bismuth-214	1.17	0.510	0.090			1464524.363	598305.085
SU5-159-281	02/15/2006	Cesium-137	3.8	0.055	0.055	U	UJ	1464524.363	598305.085
SU5-159-281	02/15/2006	Cobalt-60	0.7	0.053	0.053	U	UJ	1464524.363	598305.085
SU5-159-281	02/15/2006	Lead-210	7.4	1.100	1.100	U	UJ	1464524.363	598305.085
SU5-159-281	02/15/2006	Lead-212	16.6	0.686	0.056			1464524.363	598305.085
SU5-159-281	02/15/2006	Lead-214	8.9	0.490	0.070			1464524.363	598305.085
SU5-159-281	02/15/2006	Plutonium-238	55	2.670	0.030		J	1464524.363	598305.085
SU5-159-281	02/15/2006	Plutonium-239/240	62	0.065	0.023	J	J	1464524.363	598305.085
SU5-159-281	02/15/2006	Potassium-40	47.8	18.000	0.400			1464524.363	598305.085
SU5-159-281	02/15/2006	Protactinium-231	4	0.950	0.950	U	UJ	1464524.363	598305.085
SU5-159-281	02/15/2006	Radium-226	2.9	0.510	0.090	J	J	1464524.363	598305.085
SU5-159-281	02/15/2006	Radium-228	2.1	0.700	0.180			1464524.363	598305.085
SU5-159-281	02/15/2006	Thallium-208	0.498	0.217	0.042			1464524.363	598305.085
SU5-159-281	02/15/2006	Thorium-228	2.6	0.720	0.020			1464524.363	598305.085
SU5-159-281	02/15/2006	Thorium-230	2.8	0.690	0.030			1464524.363	598305.085
SU5-159-281	02/15/2006	Thorium-232	2.1	0.720	0.030			1464524.363	598305.085

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-282	02/15/2006	Actinium-227	4.6	0.250	0.250	U	UJ	1464539.363	598305.085
SU5-159-282	02/15/2006	Actinium-228	1.93	0.280	0.170			1464539.363	598305.085
SU5-159-282	02/15/2006	Americium-241	63	0.098	0.098	U	UJ	1464539.363	598305.085
SU5-159-282	02/15/2006	Bismuth-207	1.2	0.038	0.038	U	UJ	1464539.363	598305.085
SU5-159-282	02/15/2006	Bismuth-210M	8.3	0.054	0.054	U	UJ	1464539.363	598305.085
SU5-159-282	02/15/2006	Cesium-137	3.8	0.220	0.056			1464539.363	598305.085
SU5-159-282	02/15/2006	Cobalt-60	0.7	0.064	0.064	U	UJ	1464539.363	598305.085
SU5-159-282	02/15/2006	Lead-210	7.4	1.500	1.500	U	U	1464539.363	598305.085
SU5-159-282	02/15/2006	Lead-212	16.6	0.266	0.092			1464539.363	598305.085
SU5-159-282	02/15/2006	Lead-214	8.9	0.480	0.090			1464539.363	598305.085
SU5-159-282	02/15/2006	Plutonium-238	55	5.460	0.030			1464539.363	598305.085
SU5-159-282	02/15/2006	Plutonium-239/240	62	0.131	0.027			1464539.363	598305.085
SU5-159-282	02/15/2006	Potassium-40	47.8	9.300	0.500			1464539.363	598305.085
SU5-159-282	02/15/2006	Protactinium-231	4	0.990	0.990	U	UJ	1464539.363	598305.085
SU5-159-282	02/15/2006	Radium-226	2.9	0.480	0.220	J	J	1464539.363	598305.085
SU5-159-282	02/15/2006	Radium-228	2.1	0.280	0.170			1464539.363	598305.085
SU5-159-282	02/15/2006	Thallium-208	0.498	0.123	0.049			1464539.363	598305.085
SU5-159-282	02/15/2006	Thorium-228	2.6	0.600	0.030			1464539.363	598305.085
SU5-159-282	02/15/2006	Thorium-230	2.8	0.920	0.030			1464539.363	598305.085
SU5-159-282	02/15/2006	Thorium-232	2.1	0.610	0.020			1464539.363	598305.085
SU5-159-283	03/01/2006	Actinium-227	4.6	0.360	0.360	U	UJ	1464554.363	598305.085
SU5-159-283	03/01/2006	Americium-241	63	0.140	0.140	U	UJ	1464554.363	598305.085
SU5-159-283	03/01/2006	Bismuth-207	1.2	0.069	0.069	U	UJ	1464554.363	598305.085
SU5-159-283	03/01/2006	Bismuth-210M	8.3	0.086	0.086	U	UJ	1464554.363	598305.085
SU5-159-283	03/01/2006	Cesium-137	3.8	0.470	0.090			1464554.363	598305.085
SU5-159-283	03/01/2006	Cobalt-60	0.7	0.100	0.100	U	UJ	1464554.363	598305.085
SU5-159-283	03/01/2006	Lead-210	7.4	2.100	2.100	U	UJ	1464554.363	598305.085
SU5-159-283	03/01/2006	Lead-212	16.6	0.460	0.140			1464554.363	598305.085
SU5-159-283	03/01/2006	Lead-214	8.9	0.450	0.140			1464554.363	598305.085
SU5-159-283	03/01/2006	Plutonium-238	55	5.380	0.080		J	1464554.363	598305.085
SU5-159-283	03/01/2006	Plutonium-239/240	62	0.057	0.026	J	J	1464554.363	598305.085
SU5-159-283	03/01/2006	Potassium-40	47.8	10.900	0.500			1464554.363	598305.085
SU5-159-283	03/01/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464554.363	598305.085
SU5-159-283	03/01/2006	Radium-226	2.9	0.420	0.310	J	J	1464554.363	598305.085
SU5-159-283	03/01/2006	Radium-228	2.1	0.510	0.510	U	U	1464554.363	598305.085
SU5-159-283	03/01/2006	Thallium-208	0.498	0.141	0.087			1464554.363	598305.085
SU5-159-283	03/01/2006	Thorium-228	2.6	0.720	0.110			1464554.363	598305.085
SU5-159-283	03/01/2006	Thorium-230	2.8	1.010	0.070			1464554.363	598305.085
SU5-159-283	03/01/2006	Thorium-232	2.1	0.580	0.100			1464554.363	598305.085
SU5-159-284	02/15/2006	Actinium-227	4.6	0.440	0.440	U	UJ	1464531.863	598318.075
SU5-159-284	02/15/2006	Actinium-228	1.93	0.580	0.430			1464531.863	598318.075
SU5-159-284	02/15/2006	Americium-241	63	0.180	0.180	U	UJ	1464531.863	598318.075
SU5-159-284	02/15/2006	Bismuth-207	1.2	0.074	0.074	U	UJ	1464531.863	598318.075
SU5-159-284	02/15/2006	Bismuth-210M	8.3	0.110	0.110	U	UJ	1464531.863	598318.075
SU5-159-284	02/15/2006	Cesium-137	3.8	0.120	0.120	U	UJ	1464531.863	598318.075
SU5-159-284	02/15/2006	Cobalt-60	0.7	0.120	0.120	U	UJ	1464531.863	598318.075
SU5-159-284	02/15/2006	Lead-210	7.4	2.500	2.500	U	UJ	1464531.863	598318.075
SU5-159-284	02/15/2006	Lead-212	16.6	0.560	0.190			1464531.863	598318.075
SU5-159-284	02/15/2006	Lead-214	8.9	0.600	0.170			1464531.863	598318.075
SU5-159-284	02/15/2006	Plutonium-238	55	3.510	0.030			1464531.863	598318.075
SU5-159-284	02/15/2006	Plutonium-239/240	62	0.071	0.020	J	J	1464531.863	598318.075
SU5-159-284	02/15/2006	Potassium-40	47.8	17.800	0.600			1464531.863	598318.075
SU5-159-284	02/15/2006	Protactinium-231	4	1.600	1.600	U	U	1464531.863	598318.075
SU5-159-284	02/15/2006	Radium-226	2.9	0.470	0.360	J	J	1464531.863	598318.075
SU5-159-284	02/15/2006	Radium-228	2.1	0.580	0.430			1464531.863	598318.075
SU5-159-284	02/15/2006	Thallium-208	0.498	0.250	0.110		J	1464531.863	598318.075
SU5-159-284	02/15/2006	Thorium-228	2.6	0.870	0.510		J	1464531.863	598318.075
SU5-159-284	02/15/2006	Thorium-230	2.8	0.740	0.470		J	1464531.863	598318.075
SU5-159-284	02/15/2006	Thorium-232	2.1	0.790	0.340		J	1464531.863	598318.075
SU5-159-285	02/15/2006	Actinium-227	4.6	0.380	0.380	U	UJ	1464546.863	598318.075
SU5-159-285	02/15/2006	Americium-241	63	0.160	0.160	U	U	1464546.863	598318.075

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-285	02/15/2006	Bismuth-207	1.2	0.058	0.058	U	UJ	1464546.863	598318.075
SU5-159-285	02/15/2006	Bismuth-210M	8.3	0.078	0.078	U	UJ	1464546.863	598318.075
SU5-159-285	02/15/2006	Bismuth-214	1.17	0.530	0.170			1464546.863	598318.075
SU5-159-285	02/15/2006	Cesium-137	3.8	0.184	0.071	J	J	1464546.863	598318.075
SU5-159-285	02/15/2006	Cobalt-60	0.7	0.120	0.120	U	UJ	1464546.863	598318.075
SU5-159-285	02/15/2006	Lead-210	7.4	1.800	1.800	U	UJ	1464546.863	598318.075
SU5-159-285	02/15/2006	Lead-212	16.6	0.500	0.140			1464546.863	598318.075
SU5-159-285	02/15/2006	Lead-214	8.9	0.480	0.130			1464546.863	598318.075
SU5-159-285	02/15/2006	Plutonium-238	55	34.900	0.050		J	1464546.863	598318.075
SU5-159-285	02/15/2006	Plutonium-239/240	62	0.229	0.046			1464546.863	598318.075
SU5-159-285	02/15/2006	Potassium-40	47.8	17.700	0.700			1464546.863	598318.075
SU5-159-285	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464546.863	598318.075
SU5-159-285	02/15/2006	Radium-226	2.9	0.530	0.170	J	J	1464546.863	598318.075
SU5-159-285	02/15/2006	Radium-228	2.1	0.550	0.520			1464546.863	598318.075
SU5-159-285	02/15/2006	Thallium-208	0.498	0.187	0.068			1464546.863	598318.075
SU5-159-285	02/15/2006	Thorium-228	2.6	0.860	0.110			1464546.863	598318.075
SU5-159-285	02/15/2006	Thorium-230	2.8	1.010	0.050			1464546.863	598318.075
SU5-159-285	02/15/2006	Thorium-232	2.1	1.140	0.080			1464546.863	598318.075
SU5-159-286	02/15/2006	Actinium-227	4.6	1.140	0.620	J	J	1464539.363	598331.066
SU5-159-286	02/15/2006	Actinium-228	1.93	0.680	0.280			1464539.363	598331.066
SU5-159-286	02/15/2006	Americium-241	63	0.190	0.190	U	UJ	1464539.363	598331.066
SU5-159-286	02/15/2006	Bismuth-207	1.2	0.072	0.072	U	UJ	1464539.363	598331.066
SU5-159-286	02/15/2006	Bismuth-210M	8.3	0.099	0.099	U	UJ	1464539.363	598331.066
SU5-159-286	02/15/2006	Cesium-137	3.8	0.120	0.120	U	UJ	1464539.363	598331.066
SU5-159-286	02/15/2006	Cobalt-60	0.7	0.110	0.110	U	UJ	1464539.363	598331.066
SU5-159-286	02/15/2006	Lead-210	7.4	2.200	2.200	U	UJ	1464539.363	598331.066
SU5-159-286	02/15/2006	Lead-212	16.6	0.660	0.140			1464539.363	598331.066
SU5-159-286	02/15/2006	Lead-214	8.9	0.570	0.150			1464539.363	598331.066
SU5-159-286	02/15/2006	Plutonium-238	55	22.300	0.040			1464539.363	598331.066
SU5-159-286	02/15/2006	Plutonium-239/240	62	0.195	0.016			1464539.363	598331.066
SU5-159-286	02/15/2006	Potassium-40	47.8	16.200	0.800			1464539.363	598331.066
SU5-159-286	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464539.363	598331.066
SU5-159-286	02/15/2006	Radium-226	2.9	0.420	0.290	J	J	1464539.363	598331.066
SU5-159-286	02/15/2006	Radium-228	2.1	0.680	0.280			1464539.363	598331.066
SU5-159-286	02/15/2006	Thallium-208	0.498	0.229	0.083		J	1464539.363	598331.066
SU5-159-286	02/15/2006	Thorium-228	2.6	0.820	0.070			1464539.363	598331.066
SU5-159-286	02/15/2006	Thorium-230	2.8	1.000	0.050		J	1464539.363	598331.066
SU5-159-286	02/15/2006	Thorium-232	2.1	0.720	0.040			1464539.363	598331.066
SU5-159-287	02/15/2006	Actinium-227	4.6	0.350	0.350	U	UJ	1464554.363	598331.066
SU5-159-287	02/15/2006	Actinium-228	1.93	0.730	0.280			1464554.363	598331.066
SU5-159-287	02/15/2006	Americium-241	63	0.150	0.150	U	UJ	1464554.363	598331.066
SU5-159-287	02/15/2006	Bismuth-207	1.2	0.061	0.061	U	UJ	1464554.363	598331.066
SU5-159-287	02/15/2006	Bismuth-210M	8.3	0.088	0.088	U	UJ	1464554.363	598331.066
SU5-159-287	02/15/2006	Bismuth-214	1.17	0.620	0.130			1464554.363	598331.066
SU5-159-287	02/15/2006	Cesium-137	3.8	0.093	0.093	U	UJ	1464554.363	598331.066
SU5-159-287	02/15/2006	Cobalt-60	0.7	0.081	0.081	U	UJ	1464554.363	598331.066
SU5-159-287	02/15/2006	Lead-210	7.4	2.100	2.100	U	U	1464554.363	598331.066
SU5-159-287	02/15/2006	Lead-212	16.6	0.820	0.100			1464554.363	598331.066
SU5-159-287	02/15/2006	Lead-214	8.9	0.520	0.130			1464554.363	598331.066
SU5-159-287	02/15/2006	Plutonium-238	55	2.320	0.030			1464554.363	598331.066
SU5-159-287	02/15/2006	Plutonium-239/240	62	0.047	0.020	J	J	1464554.363	598331.066
SU5-159-287	02/15/2006	Potassium-40	47.8	17.600	0.200			1464554.363	598331.066
SU5-159-287	02/15/2006	Protactinium-231	4	1.500	1.500	U	U	1464554.363	598331.066
SU5-159-287	02/15/2006	Radium-226	2.9	0.620	0.130	J	J	1464554.363	598331.066
SU5-159-287	02/15/2006	Radium-228	2.1	0.730	0.280			1464554.363	598331.066
SU5-159-287	02/15/2006	Thallium-208	0.498	0.267	0.079		J	1464554.363	598331.066
SU5-159-287	02/15/2006	Thorium-228	2.6	0.720	0.080			1464554.363	598331.066
SU5-159-287	02/15/2006	Thorium-230	2.8	1.020	0.040		J	1464554.363	598331.066
SU5-159-287	02/15/2006	Thorium-232	2.1	0.790	0.040			1464554.363	598331.066
SU5-159-288	02/15/2006	Actinium-227	4.6	0.400	0.400	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Actinium-228	1.93	0.680	0.330			1464546.863	598344.056

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-288	02/15/2006	Americium-241	63	0.150	0.150	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Bismuth-207	1.2	0.067	0.067	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Bismuth-210M	8.3	0.095	0.095	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Cesium-137	3.8	0.110	0.110	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Cobalt-60	0.7	0.110	0.110	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Lead-210	7.4	1.800	1.800	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Lead-212	16.6	0.630	0.150			1464546.863	598344.056
SU5-159-288	02/15/2006	Lead-214	8.9	0.660	0.130			1464546.863	598344.056
SU5-159-288	02/15/2006	Plutonium-238	55	1.510	0.040			1464546.863	598344.056
SU5-159-288	02/15/2006	Plutonium-239/240	62	0.030	0.030	U	UJ	1464546.863	598344.056
SU5-159-288	02/15/2006	Potassium-40	47.8	17.400	1.100			1464546.863	598344.056
SU5-159-288	02/15/2006	Protactinium-231	4	1.500	1.500	U	U	1464546.863	598344.056
SU5-159-288	02/15/2006	Radium-226	2.9	0.630	0.360	J	J	1464546.863	598344.056
SU5-159-288	02/15/2006	Radium-228	2.1	0.680	0.330			1464546.863	598344.056
SU5-159-288	02/15/2006	Thallium-208	0.498	0.190	0.089		J	1464546.863	598344.056
SU5-159-288	02/15/2006	Thorium-228	2.6	1.040	0.030			1464546.863	598344.056
SU5-159-288	02/15/2006	Thorium-230	2.8	1.020	0.050		J	1464546.863	598344.056
SU5-159-288	02/15/2006	Thorium-232	2.1	1.050	0.060			1464546.863	598344.056
SU5-159-289	02/15/2006	Actinium-227	4.6	0.420	0.420	U	U	1464576.863	598344.056
SU5-159-289	02/15/2006	Actinium-228	1.93	1.080	0.280			1464576.863	598344.056
SU5-159-289	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464576.863	598344.056
SU5-159-289	02/15/2006	Bismuth-207	1.2	0.062	0.062	U	UJ	1464576.863	598344.056
SU5-159-289	02/15/2006	Bismuth-210M	8.3	0.088	0.088	U	UJ	1464576.863	598344.056
SU5-159-289	02/15/2006	Bismuth-212	9.87	1.840	1.000			1464576.863	598344.056
SU5-159-289	02/15/2006	Bismuth-214	1.17	0.550	0.160			1464576.863	598344.056
SU5-159-289	02/15/2006	Cesium-137	3.8	0.091	0.091	U	UJ	1464576.863	598344.056
SU5-159-289	02/15/2006	Cobalt-60	0.7	0.096	0.096	U	UJ	1464576.863	598344.056
SU5-159-289	02/15/2006	Lead-210	7.4	1.900	1.900	U	UJ	1464576.863	598344.056
SU5-159-289	02/15/2006	Lead-212	16.6	1.060	0.150			1464576.863	598344.056
SU5-159-289	02/15/2006	Lead-214	8.9	0.550	0.130			1464576.863	598344.056
SU5-159-289	02/15/2006	Plutonium-238	55	5.170	0.030			1464576.863	598344.056
SU5-159-289	02/15/2006	Plutonium-239/240	62	0.066	0.031	J	J	1464576.863	598344.056
SU5-159-289	02/15/2006	Potassium-40	47.8	22.800	0.900			1464576.863	598344.056
SU5-159-289	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464576.863	598344.056
SU5-159-289	02/15/2006	Radium-226	2.9	0.550	0.160	J	J	1464576.863	598344.056
SU5-159-289	02/15/2006	Radium-228	2.1	1.080	0.280			1464576.863	598344.056
SU5-159-289	02/15/2006	Thallium-208	0.498	0.331	0.083		J	1464576.863	598344.056
SU5-159-289	02/15/2006	Thorium-228	2.6	1.230	0.080			1464576.863	598344.056
SU5-159-289	02/15/2006	Thorium-230	2.8	0.950	0.040		J	1464576.863	598344.056
SU5-159-289	02/15/2006	Thorium-232	2.1	1.550	0.060			1464576.863	598344.056
SU5-159-290	02/15/2006	Actinium-227	4.6	1.630	0.620	J	J	1464591.863	598344.056
SU5-159-290	02/15/2006	Actinium-228	1.93	1.110	0.280			1464591.863	598344.056
SU5-159-290	02/15/2006	Americium-241	63	0.180	0.180	U	UJ	1464591.863	598344.056
SU5-159-290	02/15/2006	Bismuth-207	1.2	0.059	0.059	U	UJ	1464591.863	598344.056
SU5-159-290	02/15/2006	Bismuth-210M	8.3	0.094	0.094	U	UJ	1464591.863	598344.056
SU5-159-290	02/15/2006	Bismuth-214	1.17	0.480	0.160			1464591.863	598344.056
SU5-159-290	02/15/2006	Cesium-137	3.8	0.093	0.093	U	UJ	1464591.863	598344.056
SU5-159-290	02/15/2006	Cobalt-60	0.7	0.090	0.090	U	UJ	1464591.863	598344.056
SU5-159-290	02/15/2006	Lead-210	7.4	2.100	2.100	U	UJ	1464591.863	598344.056
SU5-159-290	02/15/2006	Lead-212	16.6	1.280	0.100			1464591.863	598344.056
SU5-159-290	02/15/2006	Lead-214	8.9	0.620	0.130			1464591.863	598344.056
SU5-159-290	02/15/2006	Plutonium-238	55	10.000	0.050			1464591.863	598344.056
SU5-159-290	02/15/2006	Plutonium-239/240	62	0.074	0.035	J	J	1464591.863	598344.056
SU5-159-290	02/15/2006	Potassium-40	47.8	20.900	0.800			1464591.863	598344.056
SU5-159-290	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464591.863	598344.056
SU5-159-290	02/15/2006	Radium-226	2.9	0.480	0.160	J	J	1464591.863	598344.056
SU5-159-290	02/15/2006	Radium-228	2.1	1.110	0.280			1464591.863	598344.056
SU5-159-290	02/15/2006	Thallium-208	0.498	0.380	0.080		J	1464591.863	598344.056
SU5-159-290	02/15/2006	Thorium-228	2.6	1.420	0.110			1464591.863	598344.056
SU5-159-290	02/15/2006	Thorium-230	2.8	1.050	0.090		J	1464591.863	598344.056
SU5-159-290	02/15/2006	Thorium-232	2.1	1.270	0.050			1464591.863	598344.056

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-291	02/15/2006	Actinium-227	4.6	0.340	0.340	U	UJ	1464606.863	598344.056
SU5-159-291	02/15/2006	Actinium-228	1.93	0.540	0.210			1464606.863	598344.056
SU5-159-291	02/15/2006	Americium-241	63	0.130	0.130	U	UJ	1464606.863	598344.056
SU5-159-291	02/15/2006	Bismuth-207	1.2	0.052	0.052	U	UJ	1464606.863	598344.056
SU5-159-291	02/15/2006	Bismuth-210M	8.3	0.083	0.083	U	U	1464606.863	598344.056
SU5-159-291	02/15/2006	Cesium-137	3.8	0.076	0.076	U	UJ	1464606.863	598344.056
SU5-159-291	02/15/2006	Cobalt-60	0.7	0.054	0.054	U	UJ	1464606.863	598344.056
SU5-159-291	02/15/2006	Lead-210	7.4	1.500	1.500	U	U	1464606.863	598344.056
SU5-159-291	02/15/2006	Lead-212	16.6	0.500	0.120			1464606.863	598344.056
SU5-159-291	02/15/2006	Lead-214	8.9	0.340	0.120			1464606.863	598344.056
SU5-159-291	02/15/2006	Plutonium-238	55	3.540	0.030			1464606.863	598344.056
SU5-159-291	02/15/2006	Plutonium-239/240	62	0.071	0.033	J	J	1464606.863	598344.056
SU5-159-291	02/15/2006	Potassium-40	47.8	10.300	0.700			1464606.863	598344.056
SU5-159-291	02/15/2006	Protactinium-231	4	1.300	1.300	U	UJ	1464606.863	598344.056
SU5-159-291	02/15/2006	Radium-226	2.9	0.470	0.280	J	J	1464606.863	598344.056
SU5-159-291	02/15/2006	Radium-228	2.1	0.540	0.210			1464606.863	598344.056
SU5-159-291	02/15/2006	Thallium-208	0.498	0.134	0.061		J	1464606.863	598344.056
SU5-159-291	02/15/2006	Thorium-228	2.6	1.110	0.080			1464606.863	598344.056
SU5-159-291	02/15/2006	Thorium-230	2.8	1.060	0.060		J	1464606.863	598344.056
SU5-159-291	02/15/2006	Thorium-232	2.1	1.190	0.050			1464606.863	598344.056
SU5-159-292	02/15/2006	Actinium-227	4.6	0.400	0.400	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Actinium-228	1.93	0.800	0.280			1464621.863	598344.056
SU5-159-292	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Bismuth-207	1.2	0.074	0.074	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Bismuth-210M	8.3	0.083	0.083	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Cesium-137	3.8	0.100	0.100	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Cobalt-60	0.7	0.072	0.072	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Lead-210	7.4	2.200	2.200	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Lead-212	16.6	0.700	0.100			1464621.863	598344.056
SU5-159-292	02/15/2006	Lead-214	8.9	0.510	0.130			1464621.863	598344.056
SU5-159-292	02/15/2006	Plutonium-238	55	4.110	0.090		J	1464621.863	598344.056
SU5-159-292	02/15/2006	Plutonium-239/240	62	0.056	0.056	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Potassium-40	47.8	18.400	0.500			1464621.863	598344.056
SU5-159-292	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464621.863	598344.056
SU5-159-292	02/15/2006	Radium-226	2.9	0.500	0.300	J	J	1464621.863	598344.056
SU5-159-292	02/15/2006	Radium-228	2.1	0.800	0.280			1464621.863	598344.056
SU5-159-292	02/15/2006	Thallium-208	0.498	0.271	0.082			1464621.863	598344.056
SU5-159-292	02/15/2006	Thorium-228	2.6	1.140	0.270			1464621.863	598344.056
SU5-159-292	02/15/2006	Thorium-230	2.8	1.070	0.210			1464621.863	598344.056
SU5-159-292	02/15/2006	Thorium-232	2.1	1.030	0.120			1464621.863	598344.056
SU5-159-293	02/15/2006	Actinium-227	4.6	0.400	0.400	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Actinium-228	1.93	0.650	0.270			1464636.863	598344.056
SU5-159-293	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Bismuth-207	1.2	0.060	0.060	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Bismuth-210M	8.3	0.079	0.079	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Cesium-137	3.8	0.100	0.100	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Cobalt-60	0.7	0.078	0.078	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Lead-210	7.4	1.800	1.800	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Lead-212	16.6	0.710	0.150			1464636.863	598344.056
SU5-159-293	02/15/2006	Lead-214	8.9	0.600	0.120			1464636.863	598344.056
SU5-159-293	02/15/2006	Plutonium-238	55	2.270	0.040			1464636.863	598344.056
SU5-159-293	02/15/2006	Plutonium-239/240	62	0.036	0.025	J	J	1464636.863	598344.056
SU5-159-293	02/15/2006	Potassium-40	47.8	17.800	0.600			1464636.863	598344.056
SU5-159-293	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464636.863	598344.056
SU5-159-293	02/15/2006	Radium-226	2.9	0.490	0.300	J	J	1464636.863	598344.056
SU5-159-293	02/15/2006	Radium-228	2.1	0.650	0.270			1464636.863	598344.056
SU5-159-293	02/15/2006	Thallium-208	0.498	0.292	0.082		J	1464636.863	598344.056
SU5-159-293	02/15/2006	Thorium-228	2.6	0.780	0.110			1464636.863	598344.056
SU5-159-293	02/15/2006	Thorium-230	2.8	1.240	0.060		J	1464636.863	598344.056
SU5-159-293	02/15/2006	Thorium-232	2.1	1.380	0.050			1464636.863	598344.056
SU5-159-294	02/15/2006	Actinium-227	4.6	1.400	0.600	J	J	1464651.863	598344.056

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-294	02/15/2006	Actinium-228	1.93	0.500	0.300			1464651.863	598344.056
SU5-159-294	02/15/2006	Americium-241	63	0.170	0.170	U	U	1464651.863	598344.056
SU5-159-294	02/15/2006	Bismuth-207	1.2	0.063	0.063	U	UJ	1464651.863	598344.056
SU5-159-294	02/15/2006	Bismuth-210M	8.3	0.093	0.093	U	UJ	1464651.863	598344.056
SU5-159-294	02/15/2006	Bismuth-212	9.87	1.460	1.200			1464651.863	598344.056
SU5-159-294	02/15/2006	Bismuth-214	1.17	0.830	0.140			1464651.863	598344.056
SU5-159-294	02/15/2006	Cesium-137	3.8	0.084	0.084	U	UJ	1464651.863	598344.056
SU5-159-294	02/15/2006	Cobalt-60	0.7	0.096	0.096	U	UJ	1464651.863	598344.056
SU5-159-294	02/15/2006	Lead-210	7.4	2.000	2.000	U	UJ	1464651.863	598344.056
SU5-159-294	02/15/2006	Lead-212	16.6	0.900	0.110			1464651.863	598344.056
SU5-159-294	02/15/2006	Lead-214	8.9	0.610	0.120			1464651.863	598344.056
SU5-159-294	02/15/2006	Plutonium-238	55	0.890	0.040			1464651.863	598344.056
SU5-159-294	02/15/2006	Plutonium-239/240	62	0.023	0.010	J	J	1464651.863	598344.056
SU5-159-294	02/15/2006	Potassium-40	47.8	24.000	0.900			1464651.863	598344.056
SU5-159-294	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464651.863	598344.056
SU5-159-294	02/15/2006	Radium-226	2.9	0.830	0.140	J	J	1464651.863	598344.056
SU5-159-294	02/15/2006	Radium-228	2.1	0.500	0.300			1464651.863	598344.056
SU5-159-294	02/15/2006	Thallium-208	0.498	0.375	0.074		J	1464651.863	598344.056
SU5-159-294	02/15/2006	Thorium-228	2.6	0.980	0.080			1464651.863	598344.056
SU5-159-294	02/15/2006	Thorium-230	2.8	0.810	0.030		J	1464651.863	598344.056
SU5-159-294	02/15/2006	Thorium-232	2.1	0.990	0.060			1464651.863	598344.056
SU5-159-295	02/15/2006	Actinium-227	4.6	0.400	0.400	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Actinium-228	1.93	0.820	0.370			1464666.863	598344.056
SU5-159-295	02/15/2006	Americium-241	63	0.150	0.150	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Bismuth-207	1.2	0.081	0.081	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Bismuth-210M	8.3	0.096	0.096	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Bismuth-212	9.87	1.310	1.300			1464666.863	598344.056
SU5-159-295	02/15/2006	Cesium-137	3.8	0.110	0.110	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Cobalt-60	0.7	0.100	0.100	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Lead-210	7.4	1.900	1.900	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Lead-212	16.6	0.750	0.110			1464666.863	598344.056
SU5-159-295	02/15/2006	Lead-214	8.9	0.650	0.130			1464666.863	598344.056
SU5-159-295	02/15/2006	Plutonium-238	55	0.540	0.020			1464666.863	598344.056
SU5-159-295	02/15/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464666.863	598344.056
SU5-159-295	02/15/2006	Potassium-40	47.8	22.900	0.800			1464666.863	598344.056
SU5-159-295	02/15/2006	Protactinium-231	4	1.600	1.600	U	U	1464666.863	598344.056
SU5-159-295	02/15/2006	Radium-226	2.9	0.600	0.340	J	J	1464666.863	598344.056
SU5-159-295	02/15/2006	Radium-228	2.1	0.820	0.370			1464666.863	598344.056
SU5-159-295	02/15/2006	Thallium-208	0.498	0.360	0.070		J	1464666.863	598344.056
SU5-159-295	02/15/2006	Thorium-228	2.6	1.160	0.070			1464666.863	598344.056
SU5-159-295	02/15/2006	Thorium-230	2.8	1.200	0.060		J	1464666.863	598344.056
SU5-159-295	02/15/2006	Thorium-232	2.1	1.070	0.030			1464666.863	598344.056
SU5-159-296	02/15/2006	Actinium-227	4.6	0.980	0.470	J	J	1464681.863	598344.056
SU5-159-296	02/15/2006	Actinium-228	1.93	0.350	0.210			1464681.863	598344.056
SU5-159-296	02/15/2006	Americium-241	63	0.140	0.140	U	UJ	1464681.863	598344.056
SU5-159-296	02/15/2006	Bismuth-207	1.2	0.055	0.055	U	UJ	1464681.863	598344.056
SU5-159-296	02/15/2006	Bismuth-210M	8.3	0.074	0.074	U	UJ	1464681.863	598344.056
SU5-159-296	02/15/2006	Bismuth-214	1.17	0.440	0.120			1464681.863	598344.056
SU5-159-296	02/15/2006	Cesium-137	3.8	0.074	0.074	U	UJ	1464681.863	598344.056
SU5-159-296	02/15/2006	Cobalt-60	0.7	0.072	0.072	U	UJ	1464681.863	598344.056
SU5-159-296	02/15/2006	Lead-210	7.4	1.800	1.800	U	UJ	1464681.863	598344.056
SU5-159-296	02/15/2006	Lead-212	16.6	0.459	0.100			1464681.863	598344.056
SU5-159-296	02/15/2006	Lead-214	8.9	0.580	0.100			1464681.863	598344.056
SU5-159-296	02/15/2006	Plutonium-238	55	0.490	0.080		J	1464681.863	598344.056
SU5-159-296	02/15/2006	Plutonium-239/240	62	0.054	0.054	U	UJ	1464681.863	598344.056
SU5-159-296	02/15/2006	Potassium-40	47.8	16.800	0.700			1464681.863	598344.056
SU5-159-296	02/15/2006	Protactinium-231	4	1.800	1.800	U	U	1464681.863	598344.056
SU5-159-296	02/15/2006	Radium-226	2.9	0.440	0.120	J	J	1464681.863	598344.056
SU5-159-296	02/15/2006	Radium-228	2.1	0.350	0.210			1464681.863	598344.056
SU5-159-296	02/15/2006	Thallium-208	0.498	0.235	0.065			1464681.863	598344.056
SU5-159-296	02/15/2006	Thorium-228	2.6	0.640	0.130			1464681.863	598344.056

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-296	**02/15/2006**	**Thorium-230**	**2.8**	**4.260**	**0.070**			**1464681.863**	**598344.056**
SU5-159-296	02/15/2006	Thorium-232	2.1	0.620	0.070			1464681.863	598344.056
SU5-159-297	02/15/2006	Actinium-227	4.6	0.320	0.320	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Americium-241	63	0.130	0.130	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Bismuth-207	1.2	0.068	0.068	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Bismuth-210M	8.3	0.072	0.072	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Cesium-137	3.8	0.091	0.091	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Cobalt-60	0.7	0.110	0.110	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Lead-210	7.4	1.600	1.600	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Lead-212	16.6	0.410	0.100			1464696.863	598344.056
SU5-159-297	02/15/2006	Plutonium-238	55	0.880	0.090		J	1464696.863	598344.056
SU5-159-297	02/15/2006	Plutonium-239/240	62	0.050	0.050	U	UJ	1464696.863	598344.056
SU5-159-297	02/15/2006	Potassium-40	47.8	13.100	0.800			1464696.863	598344.056
SU5-159-297	02/15/2006	Protactinium-231	4	1.200	1.200	U	U	1464696.863	598344.056
SU5-159-297	02/15/2006	Radium-226	2.9	0.340	0.280	J	J	1464696.863	598344.056
SU5-159-297	02/15/2006	Radium-228	2.1	0.560	0.510			1464696.863	598344.056
SU5-159-297	02/15/2006	Thallium-208	0.498	0.116	0.068			1464696.863	598344.056
SU5-159-297	02/15/2006	Thorium-228	2.6	0.660	0.150			1464696.863	598344.056
SU5-159-297	02/15/2006	Thorium-230	2.8	1.150	0.080			1464696.863	598344.056
SU5-159-297	02/15/2006	Thorium-232	2.1	0.840	0.070			1464696.863	598344.056
SU5-159-298	02/15/2006	Actinium-227	4.6	0.400	0.400	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Actinium-228	1.93	0.820	0.440			1464711.863	598344.056
SU5-159-298	02/15/2006	Americium-241	63	0.180	0.180	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Bismuth-207	1.2	0.063	0.063	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Bismuth-210M	8.3	0.093	0.093	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Cesium-137	3.8	0.110	0.110	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Cobalt-60	0.7	0.094	0.094	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Lead-210	7.4	2.400	2.400	U	U	1464711.863	598344.056
SU5-159-298	02/15/2006	Lead-212	16.6	0.880	0.120			1464711.863	598344.056
SU5-159-298	02/15/2006	Lead-214	8.9	0.690	0.140			1464711.863	598344.056
SU5-159-298	02/15/2006	Plutonium-238	55	0.930	0.050			1464711.863	598344.056
SU5-159-298	02/15/2006	Plutonium-239/240	62	0.029	0.029	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Potassium-40	47.8	25.400	0.500			1464711.863	598344.056
SU5-159-298	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464711.863	598344.056
SU5-159-298	02/15/2006	Radium-226	2.9	0.610	0.350	J	J	1464711.863	598344.056
SU5-159-298	02/15/2006	Radium-228	2.1	0.820	0.440			1464711.863	598344.056
SU5-159-298	02/15/2006	Thallium-208	0.498	0.350	0.080		J	1464711.863	598344.056
SU5-159-298	02/15/2006	Thorium-228	2.6	1.070	0.090			1464711.863	598344.056
SU5-159-298	02/15/2006	Thorium-230	2.8	1.360	0.050		J	1464711.863	598344.056
SU5-159-298	02/15/2006	Thorium-232	2.1	0.860	0.080			1464711.863	598344.056
SU5-159-299	02/15/2006	Actinium-227	4.6	1.300	0.570	J	J	1464726.863	598344.056
SU5-159-299	02/15/2006	Actinium-228	1.93	0.650	0.270			1464726.863	598344.056
SU5-159-299	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464726.863	598344.056
SU5-159-299	02/15/2006	Bismuth-207	1.2	0.068	0.068	U	UJ	1464726.863	598344.056
SU5-159-299	02/15/2006	Bismuth-210M	8.3	0.084	0.084	U	U	1464726.863	598344.056
SU5-159-299	02/15/2006	Bismuth-212	9.87	1.430	1.100			1464726.863	598344.056
SU5-159-299	02/15/2006	Cesium-137	3.8	0.082	0.082	U	UJ	1464726.863	598344.056
SU5-159-299	02/15/2006	Cobalt-60	0.7	0.088	0.088	U	UJ	1464726.863	598344.056
SU5-159-299	02/15/2006	Lead-210	7.4	2.000	2.000	U	UJ	1464726.863	598344.056
SU5-159-299	02/15/2006	Lead-212	16.6	0.630	0.130			1464726.863	598344.056
SU5-159-299	02/15/2006	Lead-214	8.9	0.520	0.130			1464726.863	598344.056
SU5-159-299	02/15/2006	Plutonium-238	55	0.330	0.039			1464726.863	598344.056
SU5-159-299	02/15/2006	Plutonium-239/240	62	0.024	0.024	U	UJ	1464726.863	598344.056
SU5-159-299	02/15/2006	Potassium-40	47.8	22.800	0.600			1464726.863	598344.056
SU5-159-299	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464726.863	598344.056
SU5-159-299	02/15/2006	Radium-226	2.9	0.440	0.270	J	J	1464726.863	598344.056
SU5-159-299	02/15/2006	Radium-228	2.1	0.650	0.270			1464726.863	598344.056
SU5-159-299	02/15/2006	Thallium-208	0.498	0.211	0.085		J	1464726.863	598344.056
SU5-159-299	02/15/2006	Thorium-228	2.6	1.010	0.080			1464726.863	598344.056
SU5-159-299	02/15/2006	Thorium-230	2.8	1.140	0.070		J	1464726.863	598344.056
SU5-159-299	02/15/2006	Thorium-232	2.1	0.970	0.090			1464726.863	598344.056

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-299D	02/15/2006	Actinium-227	4.6	0.360	0.360	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Actinium-228	1.93	0.780	0.320			1464726.863	598344.056
SU5-159-299D	02/15/2006	Americium-241	63	0.150	0.150	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Bismuth-207	1.2	0.070	0.070	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Bismuth-210M	8.3	0.087	0.087	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Cesium-137	3.8	0.093	0.093	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Cobalt-60	0.7	0.120	0.120	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Lead-210	7.4	1.800	1.800	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Lead-212	16.6	0.840	0.100			1464726.863	598344.056
SU5-159-299D	02/15/2006	Lead-214	8.9	0.630	0.130			1464726.863	598344.056
SU5-159-299D	02/15/2006	Plutonium-238	55	0.257	0.040			1464726.863	598344.056
SU5-159-299D	02/15/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Potassium-40	47.8	24.500	0.700			1464726.863	598344.056
SU5-159-299D	02/15/2006	Protactinium-231	4	1.600	1.600	U	UJ	1464726.863	598344.056
SU5-159-299D	02/15/2006	Radium-226	2.9	0.480	0.310	J	J	1464726.863	598344.056
SU5-159-299D	02/15/2006	Radium-228	2.1	0.780	0.320			1464726.863	598344.056
SU5-159-299D	02/15/2006	Thallium-208	0.498	0.295	0.075		J	1464726.863	598344.056
SU5-159-299D	02/15/2006	Thorium-228	2.6	0.780	0.100			1464726.863	598344.056
SU5-159-299D	02/15/2006	Thorium-230	2.8	0.750	0.030		J	1464726.863	598344.056
SU5-159-299D	02/15/2006	Thorium-232	2.1	0.780	0.060			1464726.863	598344.056
SU5-159-300	02/15/2006	Actinium-227	4.6	0.390	0.390	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Actinium-228	1.93	0.810	0.300			1464741.863	598344.056
SU5-159-300	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Bismuth-207	1.2	0.068	0.068	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Bismuth-210M	8.3	0.095	0.095	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Cesium-137	3.8	0.088	0.088	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Cobalt-60	0.7	0.075	0.075	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Lead-210	7.4	2.000	2.000	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Lead-212	16.6	0.870	0.140			1464741.863	598344.056
SU5-159-300	02/15/2006	Lead-214	8.9	0.780	0.140			1464741.863	598344.056
SU5-159-300	02/15/2006	Plutonium-238	55	0.252	0.031			1464741.863	598344.056
SU5-159-300	02/15/2006	Plutonium-239/240	62	0.010	0.010	U	U	1464741.863	598344.056
SU5-159-300	02/15/2006	Potassium-40	47.8	20.100	0.800			1464741.863	598344.056
SU5-159-300	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464741.863	598344.056
SU5-159-300	02/15/2006	Radium-226	2.9	0.720	0.340	J	J	1464741.863	598344.056
SU5-159-300	02/15/2006	Radium-228	2.1	0.810	0.300			1464741.863	598344.056
SU5-159-300	02/15/2006	Thallium-208	0.498	0.272	0.085		J	1464741.863	598344.056
SU5-159-300	02/15/2006	Thorium-228	2.6	1.270	0.120			1464741.863	598344.056
SU5-159-300	02/15/2006	Thorium-230	2.8	1.550	0.080		J	1464741.863	598344.056
SU5-159-300	02/15/2006	Thorium-232	2.1	1.230	0.110			1464741.863	598344.056
SU5-159-301	03/01/2006	Actinium-227	4.6	0.440	0.440	U	UJ	1464756.863	598344.056
SU5-159-301	03/01/2006	Actinium-228	1.93	0.850	0.210			1464756.863	598344.056
SU5-159-301	03/01/2006	Americium-241	63	0.180	0.180	U	UJ	1464756.863	598344.056
SU5-159-301	03/01/2006	Bismuth-207	1.2	0.077	0.077	U	UJ	1464756.863	598344.056
SU5-159-301	03/01/2006	Bismuth-210M	8.3	0.098	0.098	U	UJ	1464756.863	598344.056
SU5-159-301	03/01/2006	Cesium-137	3.8	0.130	0.130	U	U	1464756.863	598344.056
SU5-159-301	03/01/2006	Cobalt-60	0.7	0.100	0.100	U	UJ	1464756.863	598344.056
SU5-159-301	03/01/2006	Lead-210	7.4	1.700	1.700	J	J	1464756.863	598344.056
SU5-159-301	03/01/2006	Lead-212	16.6	0.820	0.140			1464756.863	598344.056
SU5-159-301	03/01/2006	Lead-214	8.9	0.660	0.150			1464756.863	598344.056
SU5-159-301	03/01/2006	Plutonium-238	55	1.480	0.070		J	1464756.863	598344.056
SU5-159-301	03/01/2006	Plutonium-239/240	62	0.039	0.026	J	J	1464756.863	598344.056
SU5-159-301	03/01/2006	Potassium-40	47.8	24.800	0.700			1464756.863	598344.056
SU5-159-301	03/01/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464756.863	598344.056
SU5-159-301	03/01/2006	Radium-226	2.9	0.620	0.350	J	J	1464756.863	598344.056
SU5-159-301	03/01/2006	Radium-228	2.1	0.850	0.210			1464756.863	598344.056
SU5-159-301	03/01/2006	Thallium-208	0.498	0.340	0.081			1464756.863	598344.056
SU5-159-301	03/01/2006	Thorium-228	2.6	1.050	0.170			1464756.863	598344.056
SU5-159-301	03/01/2006	Thorium-230	2.8	2.060	0.060			1464756.863	598344.056
SU5-159-301	03/01/2006	Thorium-232	2.1	1.220	0.120			1464756.863	598344.056
SU5-159-302	02/15/2006	Actinium-227	4.6	0.810	0.530	J	J	1464509.363	598357.046

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-302	02/15/2006	Actinium-228	1.93	0.870	0.190			1464509.363	598357.046
SU5-159-302	02/15/2006	Americium-241	63	0.160	0.160	U	UJ	1464509.363	598357.046
SU5-159-302	02/15/2006	Bismuth-207	1.2	0.062	0.062	U	UJ	1464509.363	598357.046
SU5-159-302	02/15/2006	Bismuth-210M	8.3	0.085	0.085	U	U	1464509.363	598357.046
SU5-159-302	02/15/2006	Bismuth-214	1.17	0.890	0.120			1464509.363	598357.046
SU5-159-302	02/15/2006	Cesium-137	3.8	0.086	0.086	U	UJ	1464509.363	598357.046
SU5-159-302	02/15/2006	Cobalt-60	0.7	0.079	0.079	U	UJ	1464509.363	598357.046
SU5-159-302	02/15/2006	Lead-210	7.4	2.000	2.000	U	UJ	1464509.363	598357.046
SU5-159-302	02/15/2006	Lead-212	16.6	0.530	0.110			1464509.363	598357.046
SU5-159-302	02/15/2006	Lead-214	8.9	0.730	0.140			1464509.363	598357.046
SU5-159-302	02/15/2006	Plutonium-238	55	3.120	0.030			1464509.363	598357.046
SU5-159-302	02/15/2006	Plutonium-239/240	62	0.022	0.022	U	UJ	1464509.363	598357.046
SU5-159-302	02/15/2006	Potassium-40	47.8	11.700	0.800			1464509.363	598357.046
SU5-159-302	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464509.363	598357.046
SU5-159-302	02/15/2006	Radium-226	2.9	0.890	0.120	J	J	1464509.363	598357.046
SU5-159-302	02/15/2006	Radium-228	2.1	0.870	0.190			1464509.363	598357.046
SU5-159-302	02/15/2006	Thallium-208	0.498	0.224	0.068		J	1464509.363	598357.046
SU5-159-302	02/15/2006	Thorium-228	2.6	0.800	0.050			1464509.363	598357.046
SU5-159-302	02/15/2006	Thorium-230	2.8	1.280	0.030		J	1464509.363	598357.046
SU5-159-302	02/15/2006	Thorium-232	2.1	0.660	0.030			1464509.363	598357.046
SU5-159-303	02/15/2006	Actinium-227	4.6	0.330	0.330	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Actinium-228	1.93	0.560	0.280			1464524.363	598357.046
SU5-159-303	02/15/2006	Americium-241	63	0.130	0.130	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Bismuth-207	1.2	0.059	0.059	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Bismuth-210M	8.3	0.081	0.081	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Cesium-137	3.8	0.090	0.090	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Cobalt-60	0.7	0.094	0.094	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Lead-210	7.4	1.700	1.700	U	U	1464524.363	598357.046
SU5-159-303	02/15/2006	Lead-212	16.6	0.760	0.100			1464524.363	598357.046
SU5-159-303	02/15/2006	Lead-214	8.9	0.440	0.140			1464524.363	598357.046
SU5-159-303	02/15/2006	Plutonium-238	55	1.050	0.040			1464524.363	598357.046
SU5-159-303	02/15/2006	Plutonium-239/240	62	0.031	0.031	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Potassium-40	47.8	19.500	0.100			1464524.363	598357.046
SU5-159-303	02/15/2006	Protactinium-231	4	1.500	1.500	U	UJ	1464524.363	598357.046
SU5-159-303	02/15/2006	Radium-226	2.9	0.430	0.290	J	J	1464524.363	598357.046
SU5-159-303	02/15/2006	Radium-228	2.1	0.560	0.280			1464524.363	598357.046
SU5-159-303	02/15/2006	Thallium-208	0.498	0.222	0.079		J	1464524.363	598357.046
SU5-159-303	02/15/2006	Thorium-228	2.6	0.950	0.070			1464524.363	598357.046
SU5-159-303	02/15/2006	Thorium-230	2.8	0.830	0.050		J	1464524.363	598357.046
SU5-159-303	02/15/2006	Thorium-232	2.1	1.000	0.060			1464524.363	598357.046
SU5-159-304	02/15/2006	Actinium-227	4.6	0.410	0.410	U	UJ	1464539.363	598357.046
SU5-159-304	02/15/2006	Actinium-228	1.93	0.800	0.330			1464539.363	598357.046
SU5-159-304	02/15/2006	Americium-241	63	0.190	0.190	U	U	1464539.363	598357.046
SU5-159-304	02/15/2006	Bismuth-207	1.2	0.067	0.067	U	UJ	1464539.363	598357.046
SU5-159-304	02/15/2006	Bismuth-210M	8.3	0.110	0.110	U	UJ	1464539.363	598357.046
SU5-159-304	02/15/2006	Cesium-137	3.8	0.093	0.093	U	UJ	1464539.363	598357.046
SU5-159-304	02/15/2006	Cobalt-60	0.7	0.100	0.100	U	UJ	1464539.363	598357.046
SU5-159-304	02/15/2006	Lead-210	7.4	2.400	2.400	U	U	1464539.363	598357.046
SU5-159-304	02/15/2006	Lead-212	16.6	0.770	0.110			1464539.363	598357.046
SU5-159-304	02/15/2006	Lead-214	8.9	0.690	0.130			1464539.363	598357.046
SU5-159-304	02/15/2006	Plutonium-238	55	0.084	0.035	J	J	1464539.363	598357.046
SU5-159-304	02/15/2006	Plutonium-239/240	62	0.010	0.010	U	U	1464539.363	598357.046
SU5-159-304	02/15/2006	Potassium-40	47.8	22.000	1.000			1464539.363	598357.046
SU5-159-304	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464539.363	598357.046
SU5-159-304	02/15/2006	Radium-226	2.9	0.460	0.350	J	J	1464539.363	598357.046
SU5-159-304	02/15/2006	Radium-228	2.1	0.800	0.330			1464539.363	598357.046
SU5-159-304	02/15/2006	Thallium-208	0.498	0.190	0.080		J	1464539.363	598357.046
SU5-159-304	02/15/2006	Thorium-228	2.6	1.000	0.100			1464539.363	598357.046
SU5-159-304	02/15/2006	Thorium-230	2.8	1.040	0.040		J	1464539.363	598357.046
SU5-159-304	02/15/2006	Thorium-232	2.1	0.950	0.060			1464539.363	598357.046
SU5-159-305	02/15/2006	Actinium-227	4.6	0.950	0.560	J	J	1464554.363	598357.046

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-305	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Bismuth-207	1.2	0.064	0.064	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Bismuth-210M	8.3	0.091	0.091	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Cesium-137	3.8	0.079	0.079	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Cobalt-60	0.7	0.089	0.089	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Lead-210	7.4	2.000	2.000	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Lead-212	16.6	0.510	0.130			1464554.363	598357.046
SU5-159-305	02/15/2006	Lead-214	8.9	0.610	0.130			1464554.363	598357.046
SU5-159-305	02/15/2006	Plutonium-238	55	0.266	0.036			1464554.363	598357.046
SU5-159-305	02/15/2006	Plutonium-239/240	62	0.026	0.026	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Potassium-40	47.8	17.600	0.600			1464554.363	598357.046
SU5-159-305	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464554.363	598357.046
SU5-159-305	02/15/2006	Radium-226	2.9	0.480	0.280	J	J	1464554.363	598357.046
SU5-159-305	02/15/2006	Radium-228	2.1	0.710	0.520			1464554.363	598357.046
SU5-159-305	02/15/2006	Thallium-208	0.498	0.230	0.070		J	1464554.363	598357.046
SU5-159-305	02/15/2006	Thorium-228	2.6	1.000	0.080			1464554.363	598357.046
SU5-159-305	02/15/2006	Thorium-230	2.8	1.030	0.070		J	1464554.363	598357.046
SU5-159-305	02/15/2006	Thorium-232	2.1	1.110	0.050			1464554.363	598357.046
SU5-159-306	02/15/2006	Actinium-227	4.6	0.840	0.540	J	J	1464569.363	598357.046
SU5-159-306	02/15/2006	Actinium-228	1.93	0.640	0.330			1464569.363	598357.046
SU5-159-306	02/15/2006	Americium-241	63	0.160	0.160	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Bismuth-207	1.2	0.064	0.064	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Bismuth-210M	8.3	0.087	0.087	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Cesium-137	3.8	0.094	0.094	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Cobalt-60	0.7	0.110	0.110	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Lead-210	7.4	1.800	1.800	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Lead-212	16.6	0.380	0.130			1464569.363	598357.046
SU5-159-306	02/15/2006	Lead-214	8.9	0.450	0.120			1464569.363	598357.046
SU5-159-306	02/15/2006	Plutonium-238	55	0.162	0.031			1464569.363	598357.046
SU5-159-306	02/15/2006	Plutonium-239/240	62	0.010	0.010	U	U	1464569.363	598357.046
SU5-159-306	02/15/2006	Potassium-40	47.8	16.100	1.000			1464569.363	598357.046
SU5-159-306	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Radium-226	2.9	0.260	0.260	U	UJ	1464569.363	598357.046
SU5-159-306	02/15/2006	Radium-228	2.1	0.640	0.330			1464569.363	598357.046
SU5-159-306	02/15/2006	Thallium-208	0.498	0.134	0.072		J	1464569.363	598357.046
SU5-159-306	02/15/2006	Thorium-228	2.6	0.790	0.050			1464569.363	598357.046
SU5-159-306	02/15/2006	Thorium-230	2.8	0.620	0.020			1464569.363	598357.046
SU5-159-306	02/15/2006	Thorium-232	2.1	0.750	0.030			1464569.363	598357.046
SU5-159-307	02/15/2006	Actinium-227	4.6	0.420	0.420	U	U	1464584.363	598357.046
SU5-159-307	02/15/2006	Actinium-228	1.93	0.840	0.240			1464584.363	598357.046
SU5-159-307	02/15/2006	Americium-241	63	0.150	0.150	U	UJ	1464584.363	598357.046
SU5-159-307	02/15/2006	Bismuth-207	1.2	0.063	0.063	U	UJ	1464584.363	598357.046
SU5-159-307	02/15/2006	Bismuth-210M	8.3	0.087	0.087	U	UJ	1464584.363	598357.046
SU5-159-307	02/15/2006	Cesium-137	3.8	0.077	0.077	U	UJ	1464584.363	598357.046
SU5-159-307	02/15/2006	Cobalt-60	0.7	0.083	0.083	U	UJ	1464584.363	598357.046
SU5-159-307	02/15/2006	Lead-210	7.4	2.100	2.100	U	UJ	1464584.363	598357.046
SU5-159-307	02/15/2006	Lead-212	16.6	0.560	0.130			1464584.363	598357.046
SU5-159-307	02/15/2006	Lead-214	8.9	0.310	0.130			1464584.363	598357.046
SU5-159-307	02/15/2006	Plutonium-238	55	3.790	0.030			1464584.363	598357.046
SU5-159-307	02/15/2006	Plutonium-239/240	62	0.022	0.012	J	J	1464584.363	598357.046
SU5-159-307	02/15/2006	Potassium-40	47.8	16.200	0.600			1464584.363	598357.046
SU5-159-307	02/15/2006	Protactinium-231	4	1.500	1.500	U	UJ	1464584.363	598357.046
SU5-159-307	02/15/2006	Radium-226	2.9	0.400	0.300	J	J	1464584.363	598357.046
SU5-159-307	02/15/2006	Radium-228	2.1	0.840	0.240			1464584.363	598357.046
SU5-159-307	02/15/2006	Thallium-208	0.498	0.229	0.093		J	1464584.363	598357.046
SU5-159-307	02/15/2006	Thorium-228	2.6	0.760	0.040			1464584.363	598357.046
SU5-159-307	02/15/2006	Thorium-230	2.8	0.650	0.030			1464584.363	598357.046
SU5-159-307	02/15/2006	Thorium-232	2.1	0.730	0.030			1464584.363	598357.046
SU5-159-308	02/15/2006	Actinium-227	4.6	1.030	0.590	J	J	1464599.363	598357.046
SU5-159-308	02/15/2006	Actinium-228	1.93	0.360	0.290			1464599.363	598357.046
SU5-159-308	02/15/2006	Americium-241	63	0.160	0.160	U	UJ	1464599.363	598357.046

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-308	02/15/2006	Bismuth-207	1.2	0.066	0.066	U	UJ	1464599.363	598357.046
SU5-159-308	02/15/2006	Bismuth-210M	8.3	0.093	0.093	U	UJ	1464599.363	598357.046
SU5-159-308	02/15/2006	Cesium-137	3.8	0.092	0.092	U	UJ	1464599.363	598357.046
SU5-159-308	02/15/2006	Cobalt-60	0.7	0.076	0.076	U	UJ	1464599.363	598357.046
SU5-159-308	02/15/2006	Lead-210	7.4	2.000	2.000	U	UJ	1464599.363	598357.046
SU5-159-308	02/15/2006	Lead-212	16.6	0.600	0.140			1464599.363	598357.046
SU5-159-308	02/15/2006	Lead-214	8.9	0.520	0.110			1464599.363	598357.046
SU5-159-308	02/15/2006	Plutonium-238	55	0.112	0.026			1464599.363	598357.046
SU5-159-308	02/15/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464599.363	598357.046
SU5-159-308	02/15/2006	Potassium-40	47.8	17.300	0.700			1464599.363	598357.046
SU5-159-308	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464599.363	598357.046
SU5-159-308	02/15/2006	Radium-226	2.9	0.370	0.270	J	J	1464599.363	598357.046
SU5-159-308	02/15/2006	Radium-228	2.1	0.360	0.290			1464599.363	598357.046
SU5-159-308	02/15/2006	Thallium-208	0.498	0.225	0.071		J	1464599.363	598357.046
SU5-159-308	02/15/2006	Thorium-228	2.6	0.720	0.100			1464599.363	598357.046
SU5-159-308	02/15/2006	Thorium-230	2.8	0.740	0.080			1464599.363	598357.046
SU5-159-308	02/15/2006	Thorium-232	2.1	0.660	0.040			1464599.363	598357.046
SU5-159-309	02/15/2006	Actinium-227	4.6	0.210	0.210	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Americium-241	63	0.090	0.090	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Bismuth-207	1.2	0.037	0.037	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Bismuth-210M	8.3	0.056	0.056	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Cesium-137	3.8	0.064	0.064	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Cobalt-60	0.7	0.073	0.073	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Lead-210	7.4	1.200	1.200	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Lead-212	16.6	0.154	0.083			1464614.363	598357.046
SU5-159-309	02/15/2006	Lead-214	8.9	0.320	0.080		J	1464614.363	598357.046
SU5-159-309	02/15/2006	Plutonium-238	55	0.195	0.022			1464614.363	598357.046
SU5-159-309	02/15/2006	Plutonium-239/240	62	0.012	0.012	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Potassium-40	47.8	4.500	0.600			1464614.363	598357.046
SU5-159-309	02/15/2006	Protactinium-231	4	0.740	0.740	U	U	1464614.363	598357.046
SU5-159-309	02/15/2006	Radium-226	2.9	0.310	0.230	J	J	1464614.363	598357.046
SU5-159-309	02/15/2006	Radium-228	2.1	0.190	0.190	U	UJ	1464614.363	598357.046
SU5-159-309	02/15/2006	Thorium-228	2.6	0.164	0.054			1464614.363	598357.046
SU5-159-309	02/15/2006	Thorium-230	2.8	0.370	0.030			1464614.363	598357.046
SU5-159-309	02/15/2006	Thorium-232	2.1	0.171	0.031			1464614.363	598357.046
SU5-159-309D	02/15/2006	Actinium-227	4.6	0.280	0.280	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Americium-241	63	0.110	0.110	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Bismuth-207	1.2	0.058	0.058	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Bismuth-210M	8.3	0.067	0.067	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Cesium-137	3.8	0.048	0.048	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Cobalt-60	0.7	0.056	0.056	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Lead-210	7.4	1.600	1.600	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Lead-212	16.6	0.150	0.091			1464614.363	598357.046
SU5-159-309D	02/15/2006	Lead-214	8.9	0.250	0.120		J	1464614.363	598357.046
SU5-159-309D	02/15/2006	Plutonium-238	55	0.074	0.022	J	J	1464614.363	598357.046
SU5-159-309D	02/15/2006	Plutonium-239/240	62	0.019	0.019	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Potassium-40	47.8	4.500	0.600			1464614.363	598357.046
SU5-159-309D	02/15/2006	Protactinium-231	4	0.920	0.920	U	U	1464614.363	598357.046
SU5-159-309D	02/15/2006	Radium-226	2.9	0.260	0.260	U	UJ	1464614.363	598357.046
SU5-159-309D	02/15/2006	Radium-228	2.1	0.360	0.360	U	U	1464614.363	598357.046
SU5-159-309D	02/15/2006	Thorium-228	2.6	0.135	0.059			1464614.363	598357.046
SU5-159-309D	02/15/2006	Thorium-230	2.8	0.540	0.030			1464614.363	598357.046
SU5-159-309D	02/15/2006	Thorium-232	2.1	0.071	0.027	J	J	1464614.363	598357.046
SU5-159-310	02/15/2006	Actinium-227	4.6	0.230	0.230	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Americium-241	63	0.082	0.082	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Bismuth-207	1.2	0.033	0.033	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Bismuth-210M	8.3	0.047	0.047	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Cesium-137	3.8	0.050	0.050	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Cobalt-60	0.7	0.043	0.043	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Lead-210	7.4	1.100	1.100	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Plutonium-238	55	0.800	0.030			1464516.863	598370.037

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-310	02/15/2006	Plutonium-239/240	62	0.026	0.026	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Potassium-40	47.8	1.700	1.400			1464516.863	598370.037
SU5-159-310	02/15/2006	Protactinium-231	4	0.940	0.940	U	U	1464516.863	598370.037
SU5-159-310	02/15/2006	Radium-226	2.9	0.140	0.140	U	UJ	1464516.863	598370.037
SU5-159-310	02/15/2006	Radium-228	2.1	0.200	0.200	U	U	1464516.863	598370.037
SU5-159-310	02/15/2006	Thorium-228	2.6	0.150	0.058			1464516.863	598370.037
SU5-159-310	02/15/2006	Thorium-230	2.8	0.300	0.020			1464516.863	598370.037
SU5-159-310	02/15/2006	Thorium-232	2.1	0.167	0.040			1464516.863	598370.037
SU5-159-311	03/01/2006	Actinium-227	4.6	0.580	0.440	J	J	1464531.863	598370.037
SU5-159-311	03/01/2006	Americium-241	63	0.130	0.130	U	U	1464531.863	598370.037
SU5-159-311	03/01/2006	Bismuth-207	1.2	0.049	0.049	U	UJ	1464531.863	598370.037
SU5-159-311	03/01/2006	Bismuth-210M	8.3	0.081	0.081	U	UJ	1464531.863	598370.037
SU5-159-311	03/01/2006	Cesium-137	3.8	0.071	0.071	U	UJ	1464531.863	598370.037
SU5-159-311	03/01/2006	Cobalt-60	0.7	0.092	0.092	U	UJ	1464531.863	598370.037
SU5-159-311	03/01/2006	Lead-210	7.4	1.900	1.900	U	U	1464531.863	598370.037
SU5-159-311	03/01/2006	Lead-212	16.6	0.292	0.110			1464531.863	598370.037
SU5-159-311	03/01/2006	Lead-214	8.9	0.310	0.120			1464531.863	598370.037
SU5-159-311	03/01/2006	Plutonium-238	55	0.900	0.090		J	1464531.863	598370.037
SU5-159-311	03/01/2006	Plutonium-239/240	62	0.078	0.078	U	UJ	1464531.863	598370.037
SU5-159-311	03/01/2006	Potassium-40	47.8	8.600	0.500			1464531.863	598370.037
SU5-159-311	03/01/2006	Protactinium-231	4	1.400	1.400	U	UJ	1464531.863	598370.037
SU5-159-311	03/01/2006	Radium-226	2.9	0.330	0.240	J	J	1464531.863	598370.037
SU5-159-311	03/01/2006	Radium-228	2.1	0.330	0.330	U	U	1464531.863	598370.037
SU5-159-311	03/01/2006	Thallium-208	0.498	0.082	0.061			1464531.863	598370.037
SU5-159-311	03/01/2006	Thorium-228	2.6	0.420	0.190			1464531.863	598370.037
SU5-159-311	03/01/2006	Thorium-230	2.8	0.760	0.130			1464531.863	598370.037
SU5-159-311	03/01/2006	Thorium-232	2.1	0.530	0.120			1464531.863	598370.037
SU5-159-312	02/15/2006	Actinium-227	4.6	0.370	0.370	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Actinium-228	1.93	0.710	0.330			1464546.863	598370.037
SU5-159-312	02/15/2006	Americium-241	63	0.160	0.160	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Bismuth-207	1.2	0.080	0.080	U	U	1464546.863	598370.037
SU5-159-312	02/15/2006	Bismuth-210M	8.3	0.088	0.088	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Cesium-137	3.8	0.110	0.110	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Cobalt-60	0.7	0.130	0.130	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Lead-210	7.4	2.100	2.100	U	U	1464546.863	598370.037
SU5-159-312	02/15/2006	Lead-212	16.6	1.000	0.110			1464546.863	598370.037
SU5-159-312	02/15/2006	Lead-214	8.9	1.070	0.140			1464546.863	598370.037
SU5-159-312	02/15/2006	Plutonium-238	55	0.040	0.040	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Plutonium-239/240	62	0.028	0.028	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Potassium-40	47.8	18.800	0.900			1464546.863	598370.037
SU5-159-312	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464546.863	598370.037
SU5-159-312	02/15/2006	Radium-226	2.9	0.950	0.410	J	J	1464546.863	598370.037
SU5-159-312	02/15/2006	Radium-228	2.1	0.710	0.330			1464546.863	598370.037
SU5-159-312	02/15/2006	Thallium-208	0.498	0.300	0.083		J	1464546.863	598370.037
SU5-159-312	02/15/2006	Thorium-228	2.6	1.180	0.050			1464546.863	598370.037
SU5-159-312	02/15/2006	Thorium-230	2.8	1.310	0.040			1464546.863	598370.037
SU5-159-312	02/15/2006	Thorium-232	2.1	1.120	0.020			1464546.863	598370.037
SU5-159-313	02/15/2006	Actinium-227	4.6	0.500	0.500	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Actinium-228	1.93	0.740	0.360			1464561.863	598370.037
SU5-159-313	02/15/2006	Americium-241	63	0.210	0.210	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Bismuth-207	1.2	0.098	0.098	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Bismuth-210M	8.3	0.110	0.110	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Cesium-137	3.8	0.098	0.098	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Cobalt-60	0.7	0.130	0.130	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Lead-210	7.4	2.800	2.800	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Lead-212	16.6	0.790	0.180			1464561.863	598370.037
SU5-159-313	02/15/2006	Lead-214	8.9	0.760	0.160			1464561.863	598370.037
SU5-159-313	02/15/2006	Plutonium-238	55	0.042	0.042	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464561.863	598370.037
SU5-159-313	02/15/2006	Potassium-40	47.8	21.800	0.900			1464561.863	598370.037
SU5-159-313	02/15/2006	Protactinium-231	4	1.700	1.700	U	U	1464561.863	598370.037

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-313	02/15/2006	Radium-226	2.9	0.730	0.410	J	J	1464561.863	598370.037
SU5-159-313	02/15/2006	Radium-228	2.1	0.740	0.360			1464561.863	598370.037
SU5-159-313	02/15/2006	Thallium-208	0.498	0.370	0.110			1464561.863	598370.037
SU5-159-313	02/15/2006	Thorium-228	2.6	1.100	0.050			1464561.863	598370.037
SU5-159-313	02/15/2006	Thorium-230	2.8	0.880	0.030			1464561.863	598370.037
SU5-159-313	02/15/2006	Thorium-232	2.1	0.900	0.030			1464561.863	598370.037
SU5-159-314	02/15/2006	Actinium-227	4.6	1.470	0.580	J	J	1464576.863	598370.037
SU5-159-314	02/15/2006	Actinium-228	1.93	1.090	0.270			1464576.863	598370.037
SU5-159-314	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464576.863	598370.037
SU5-159-314	02/15/2006	Bismuth-207	1.2	0.066	0.066	U	UJ	1464576.863	598370.037
SU5-159-314	02/15/2006	Bismuth-210M	8.3	0.085	0.085	U	UJ	1464576.863	598370.037
SU5-159-314	02/15/2006	Bismuth-214	1.17	0.650	0.140			1464576.863	598370.037
SU5-159-314	02/15/2006	Cesium-137	3.8	0.088	0.088	U	UJ	1464576.863	598370.037
SU5-159-314	02/15/2006	Cobalt-60	0.7	0.100	0.100	U	UJ	1464576.863	598370.037
SU5-159-314	02/15/2006	Lead-210	7.4	2.100	2.100	U	U	1464576.863	598370.037
SU5-159-314	02/15/2006	Lead-212	16.6	0.970	0.140			1464576.863	598370.037
SU5-159-314	02/15/2006	Lead-214	8.9	0.690	0.120			1464576.863	598370.037
SU5-159-314	02/15/2006	Plutonium-238	55	2.360	0.040			1464576.863	598370.037
SU5-159-314	02/15/2006	Plutonium-239/240	62	0.023	0.023	U	UJ	1464576.863	598370.037
SU5-159-314	02/15/2006	Potassium-40	47.8	26.000	0.600			1464576.863	598370.037
SU5-159-314	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464576.863	598370.037
SU5-159-314	02/15/2006	Radium-226	2.9	0.650	0.140	J	J	1464576.863	598370.037
SU5-159-314	02/15/2006	Radium-228	2.1	1.090	0.270			1464576.863	598370.037
SU5-159-314	02/15/2006	Thallium-208	0.498	0.284	0.077		J	1464576.863	598370.037
SU5-159-314	02/15/2006	Thorium-228	2.6	1.570	0.060			1464576.863	598370.037
SU5-159-314	02/15/2006	Thorium-230	2.8	1.090	0.040			1464576.863	598370.037
SU5-159-314	02/15/2006	Thorium-232	2.1	1.340	0.060			1464576.863	598370.037
SU5-159-315	02/15/2006	Actinium-227	4.6	0.400	0.400	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Actinium-228	1.93	1.140	0.280			1464591.863	598370.037
SU5-159-315	02/15/2006	Americium-241	63	0.160	0.160	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Bismuth-207	1.2	0.080	0.080	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Bismuth-210M	8.3	0.098	0.098	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Bismuth-212	9.87	1.960	1.200			1464591.863	598370.037
SU5-159-315	02/15/2006	Cesium-137	3.8	0.120	0.120	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Cobalt-60	0.7	0.140	0.140	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Lead-210	7.4	2.200	2.200	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Lead-212	16.6	1.160	0.180			1464591.863	598370.037
SU5-159-315	02/15/2006	Lead-214	8.9	0.720	0.150			1464591.863	598370.037
SU5-159-315	02/15/2006	Plutonium-238	55	0.790	0.040			1464591.863	598370.037
SU5-159-315	02/15/2006	Plutonium-239/240	62	0.027	0.027	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Potassium-40	47.8	29.500	0.900			1464591.863	598370.037
SU5-159-315	02/15/2006	Protactinium-231	4	1.700	1.700	U	UJ	1464591.863	598370.037
SU5-159-315	02/15/2006	Radium-226	2.9	0.690	0.380	J	J	1464591.863	598370.037
SU5-159-315	02/15/2006	Radium-228	2.1	1.140	0.280			1464591.863	598370.037
SU5-159-315	**02/15/2006**	**Thallium-208****	**0.498**	**0.530**	**0.080**		**J**	**1464591.863**	**598370.037**
SU5-159-315	02/15/2006	Thorium-228	2.6	1.170	0.070			1464591.863	598370.037
SU5-159-315	02/15/2006	Thorium-230	2.8	0.900	0.020			1464591.863	598370.037
SU5-159-315	02/15/2006	Thorium-232	2.1	1.210	0.040			1464591.863	598370.037
SU5-159-316	02/15/2006	Actinium-227	4.6	0.400	0.400	U	UJ	1464606.863	598370.037
SU5-159-316	02/15/2006	Actinium-228	1.93	0.820	0.370			1464606.863	598370.037
SU5-159-316	02/15/2006	Americium-241	63	0.160	0.160	U	UJ	1464606.863	598370.037
SU5-159-316	02/15/2006	Bismuth-207	1.2	0.066	0.066	U	UJ	1464606.863	598370.037
SU5-159-316	02/15/2006	Bismuth-210M	8.3	0.092	0.092	U	UJ	1464606.863	598370.037
SU5-159-316	02/15/2006	Bismuth-212	9.87	1.460	1.000			1464606.863	598370.037
SU5-159-316	02/15/2006	Cesium-137	3.8	0.087	0.087	U	UJ	1464606.863	598370.037
SU5-159-316	02/15/2006	Cobalt-60	0.7	0.100	0.100	U	UJ	1464606.863	598370.037
SU5-159-316	02/15/2006	Lead-210	7.4	2.100	2.100	U	UJ	1464606.863	598370.037
SU5-159-316	02/15/2006	Lead-212	16.6	0.990	0.170			1464606.863	598370.037
SU5-159-316	02/15/2006	Lead-214	8.9	0.370	0.160			1464606.863	598370.037
SU5-159-316	02/15/2006	Plutonium-238	55	0.190	0.038			1464606.863	598370.037
SU5-159-316	02/15/2006	Plutonium-239/240	62	0.035	0.035	U	UJ	1464606.863	598370.037

Table 1: SUs 2-5 Offsite Verification Results (pCi/g)

[results >CO and <HS in bold]

Location	Date	Analyte	CO	Result	DL	Lab Qual	Data Qual	X Coord	Y Coord
SU5-159-316	02/15/2006	Potassium-40	47.8	34.000	0.800			1464606.863	598370.037
SU5-159-316	02/15/2006	Protactinium-231	4	1.700	1.700	U	U	1464606.863	598370.037
SU5-159-316	02/15/2006	Radium-226	2.9	0.630	0.320	J	J	1464606.863	598370.037
SU5-159-316	02/15/2006	Radium-228	2.1	0.820	0.370			1464606.863	598370.037
SU5-159-316	02/15/2006	Thallium-208	0.498	0.380	0.080		J	1464606.863	598370.037
SU5-159-316	02/15/2006	Thorium-228	2.6	1.400	0.050			1464606.863	598370.037
SU5-159-316	02/15/2006	Thorium-230	2.8	0.890	0.040			1464606.863	598370.037
SU5-159-316	02/15/2006	Thorium-232	2.1	1.190	0.020			1464606.863	598370.037
SU5-159-317	02/15/2006	Actinium-227	4.6	0.410	0.410	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Americium-241	63	0.170	0.170	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Bismuth-207	1.2	0.075	0.075	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Bismuth-210M	8.3	0.090	0.090	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Cesium-137	3.8	0.090	0.090	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Cobalt-60	0.7	0.095	0.095	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Lead-210	7.4	2.300	2.300	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Lead-212	16.6	0.340	0.150			1464524.363	598383.027
SU5-159-317	02/15/2006	Lead-214	8.9	0.650	0.160			1464524.363	598383.027
SU5-159-317	02/15/2006	Plutonium-238	55	0.140	0.026			1464524.363	598383.027
SU5-159-317	02/15/2006	Plutonium-239/240	62	0.030	0.030	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Potassium-40	47.8	17.500	1.000			1464524.363	598383.027
SU5-159-317	02/15/2006	Protactinium-231	4	1.800	1.800	U	UJ	1464524.363	598383.027
SU5-159-317	02/15/2006	Radium-226	2.9	0.590	0.370	J	J	1464524.363	598383.027
SU5-159-317	02/15/2006	Radium-228	2.1	0.600	0.590			1464524.363	598383.027
SU5-159-317	02/15/2006	Thallium-208	0.498	0.229	0.070		J	1464524.363	598383.027
SU5-159-317	02/15/2006	Thorium-228	2.6	0.820	0.080			1464524.363	598383.027
SU5-159-317	02/15/2006	Thorium-230	2.8	0.710	0.040			1464524.363	598383.027
SU5-159-317	02/15/2006	Thorium-232	2.1	0.780	0.040			1464524.363	598383.027

D: duplicate
CO: cleanup objective
U: not detetced
J: estimated
HS: hot spot criteria
DL: detetction limit
** Thallium-208 (Tl-208) is a daughter product in the Th-232 decay chain. Since Th-232 is a contaminant of concern (COC), and all Th-232 results meet the cleanup criteria, the Tl-208 CO exceedances are not considered significant because the CO for the parent nuclide (Th-232) accounts for daughter product activity. Therefore, no further action will be taken based on the parent nuclide (Th-232+D) results.

Table 2: SUs and COCs

SU	1	2	3	4	5
Pu-238	X	X	X	X	X
Th-230	X	X	X	X	X
Th-232	X	X	X	X	X
Ac-227					X
Pb-210					X
Pa-231					X
Ra-226					X

SU: survey unit

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APPENDIX C

POST-EX SUD EXCERPTS

- SUs 2-5
- SU6

Survey Unit Design (SUD)

Final

Project: PRSs 159, 155 – 158, & WD Footprint

Review & Approval

Project Engineer: Karen Arthur _____

Reviewer: James Fontaine _____

Reviewer: _____

Document	Title
Action Memo	*UGL Action Memorandum, Final, September 2003*
RP	*UGLs Removal Plan. Final, April 2004*
WP	*Soil Removal, ELT-MND-105-00, April 2004*
VSAP	*Standard Verification Sampling & Analysis Plan, Final, August 2004*

Changes from Pre-Ex:

D&D Work Plan	*Work Package, SD Building and Surrounding Soils Title II, 17 April 1996*

☐ **Pre-Excavation** or ☒ **Post-Excavation**?

PostEx SUD Partial II

(includes SU2-5 of PRS 159 only)

Summary of Changes (for Post-Excavation SUDs ONLY) (see following pages for details)	YES	NO	Comment
1. Did the COC(s) change?	X		Added COCs to SU5; see Item 3a
2. Did the grid size or N change?	X		Expanded SUs
3. Did the classification change?		x	
4. Were bias/judgmental samples collected?		x	
5. Other significant change?	x		Expanded SUs

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SUD Worksheet

Acronyms

AM	Action Memo
BGS	Below Ground Surface
CO	Cleanup Objective
COC	Contaminant of Concern
ELT	Earthline Technologies (Subcontractor for the UGL project)
EPA	Environmental Protection Agency
FSS	Final Status Survey
HS	Hot Spot
M^2	Square Meters
MARSSIM	Multi – Agency Radiation Survey and Site Investigation Manual
MDC	Minimum Detectable Concentration
MEIMS	Mound Environmental Information Management System
MND	Mound
OP	Operation
PCi/g	pico (10^{-12}) curies per gram
Pu238	Plutonium 238
PRS	Potential Release Site
QA/QC	Quality Assurance/Quality Control
RadCon	Radiological Control
RASS	Remedial Action Support Survey
SD	Sanitary Disposal (SD) Building
Std dev	Standard Deviation
SU	Survey Unit
SUD	Survey Unit Design
Th230, Th232	Thorium 230, Thorium 232
U238	Uranium 238
UGL	Underground Lines
VSAP	Verification Sampling and Analysis Plan
WD	Waste Disposal (WD) Building
WDA	Waste Disposal Annex (WDA) Building
WP	Work Package

Item 1

Summary of historic information relevant to this SUD:

The Removal Plan associated with this SUD addressed identified contamination areas with contaminants of concern (COCs) above the cleanup objectives (COs).

PRSs 155-159 are all PRSs associated with the old SD Plant. PRS 159 is identified in the UGL Action Memo, Table 2, as "Area 4A, Sewage Sludge Drying Pits / Removed 1997." Figure 1 from the UGL AM, attached herein, also designated PRS 159 as the overall boundary identifier (designated by a dashed line) which includes these PRSs as well as the WD building footprint. Removals were previously performed in these areas but verification/confirmation was not performed. No COCs are listed in the UGL AM for PRSs 155-158. Contaminants will be those identified during RadCon soil surveying activities and added to the Post Excavation SUD. Per the UGL AM, where no remediation work is required, e. g., the previously removed (~1997) SD Sludge Drying Pits, only verification sampling is required. COCs for PRS 159 are Pu238 and Th232. In addition, several historical samples within the PRS 159 boundaries are above cleanup objectives and will be removed as part of the remediation effort. See Figure 2, Anticipated Limits of Excavation, PRS 159 Area, which defines the remediation effort. See also Item 10 which describes actions taken in the field to ensure all contamination has been discovered and removed.

WD Footprint is an area of soil removal below the former WD Building, which was removed in the spring of 2004.

Although PRS 413 is located within the PRS 159 Area, a separate SUD is planned for that PRS because it is a chemical (creosote) PRS and not a radiological PRS. Subsequent to the removal action and verification sampling described in this (PRS159) SUD, verification of PRS 413 will be accomplished.

Changes if any, from Pre-ex SUD:

A separate SUD for PRS 413 has been approved, which requires no further sampling.

Item 2

Summary of historic **data** relevant to SU:

PRS 155-158: Authorizing Document: UGL Action Memo, Final, September 2003. No contaminants listed in the UGL AM; contaminants will be those identified during RadCon soil surveying activities.

PRS 159: Authorizing Document: UGL Action Memo, Final September 2003. Contaminants include: Pu238 and Th232. Historical samples indicate contamination varies from the surface to ten feet bgs.

WD Footprint: Authorizing Document: UGL Action Memo, Final, September 2003. No contaminants listed in the UGL AM. Pre-excavation soil sampling indicates COCs Pu-238 and Th-230. In addition, historical samples above cleanup objectives indicate the addition of TH232. (see SUs 3-5)

RASS samples will be collected during the removals. Any contaminant found in the RASS sampling process above the CO will be added to the list of COCs.

Item 3a

COC	BASIS	(pCi/g) CO	HS	Offsite Analysis & Compendium Method: gamma (A-015)	Iso Pu (A-012)	Iso Th (A-012)	Iso U (A-012)
Pu238	*Based on UGL AM: PRS 159*	55	165.13		X		

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Th232	*Based on UGL AM: PRS 159*	2.1	3.5			X	
Th230	*WD footprint (SUs 3-5) based on pre-excavation soil samples*	2.8	4.6			X	

Analyses are to be performed per Mound Methods Compendium and COs (for surface samples/analysis i.e., bedrock, asphalt, concrete) as applicable. Compendium Method A-012 is Isotopic Uranium, Isotopic Plutonium, and Isotopic Thorium by Alpha Spectrometry. Surface samples/analysis are to be in accordance with MD-80036: OP 10001, 10002, 30005, 30007, and 30040. Hard surfaces will be swiped and gross alpha and beta measurements will be performed and compared to the most restrictive COC in Mound 2000 Work Plan Appendix A Table 1 (NUREG 1.86 Regulatory Guide). If the location fails to meet the most restrictive criteria then it will be sent to alpha spec for determination of the COC so the applicable, instead of the most restrictive, criteria can be applied.

Changes if any, from Pre-ex SUD:
COCs for SU2-4 are now Pu-238, Th-230, and Th-232
COCs for SU5 are now Pu-238, Th-230, Th-232, Pb-210, Ra-226, Ac-227, Pa-231 due to results from RASS sampling (See Appendix II Table 1 for further comparison between Pre-ex and Post ex SUD)

Item 3b

Chem basis for std dev, AM COCs/New COCs NA

Item 4

Classify Areas & provide justification

All five SUs are Class 1.

Selection	Class	Scan Coverage guidelines
X	1	100%
	2	10-90%
	3	Judgmental

Changes if any, from Pre-ex SUD: SU6 will be added in Partial III of this SUD and it will be Class I

Item 5

Subdivide areas into SUs

See Attachment A for Figures

See Attachment B for Historical Sample Data – Standard Deviations for COCs. The data set is historical data without results that exceed COs in order to mimic the "as-left" condition.

See Attachment C for MARSSIM Survey Unit Spreadsheets

This SUD consists of five SUs (see attached Figure 3): (SUs were selected based on physical location and common COCs.)

SU1 covers the former sludge drying beds and drum removal area of PRS 159, and is approximately 4220 sq. ft. COCs: Pu238 and Th232.
SU2 covers the southern portion of PRS 159, and is approximately 500 sq. ft. (Five small dig locations.). COCs: Pu238 and Th232.
SU3 covers the western portion of WD Building including the old SD Plant Area & soil northwest of WDA. This survey unit includes PRSs 155-158 and is approximately 11,900sq. ft. COCs: Pu238, Th230, and Th232.
SU4 covers the central portion of WD Building, including the soil area south of the building. This area is approximately 6930 sq. ft. COCs: Same as SU3.
SU5 covers the eastern portion of WD Building and is approximately 13,980 sq. ft. COCs: Same as SU3.

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Changes if any, from Pre-ex SUD:

SU2 covers the western portion of WD Building including the old SD Plant Area & soil northwest of WDA. This survey unit includes PRSs 155-158 and is approximately 17,260 sq. ft. It also covers eight small dig locations at the southwestern side, four within the SU2 boundary and 4 outliers designated SU2a-2d. The crosswalk from Pre-Ex to Post Ex SUD is as follows: Pre SU2a=Post SU2a & SU2b, Pre SU2b=Post SU2c, Pre SU2c=PostSU5, Pre SU2d=Post 4 small digs within SU2, Pre SU2e= Post SU2d. COCs: Pu238, Th-230, and Th232.

SU3 covers the central portion of WD Building, including the soil area south of the building. This area is approximately 17,423 sq. ft. COCs: Same as SU2.

SU4 covers the eastern portion of WD Building and is approximately 15,561 sq. ft. COCs: Same as SU2.

SU5 covers an expanded area of excavation along and across the road at the southern side (originally SU2c). This area is approximately 9,263 sq. ft. COCs: Pu-238, Th-230, Th-232, Pb-210, Ra-226, Ac-227, Pa-231

SU6 Final area and COCs to be determined later in Post Ex SUD Partial III

(See Appendix II Table 1 for further comparison between Pre-ex and Post ex SUD)

Item 6a

Calculations / Rad

1. Calculate the (s) for each COC listed above: See Attachment C.

2. Number of Samples (N): See Attachment C.

Spreadsheet-Calculated Numbers of Samples: SU1 = 12; SU2 =12; SU3 = 15; SU4 = 15 and SU5 = 15.

Scanning MDC (Area Factor) corrected number of samples: SU1 = 244, SU2 = 16, SU3 = 1074, SU4 = 504, SU5 = 1250

Default 15 foot triangular grid (see Figure 3): Sample locations were selected by overlaying onto the SU a 15-foot triangular plan with a random starting point. The determination of the number of samples is consistent with section 3.7 of the standard VSAP, which provides a default grid spacing for SUs where PU-238 is the primary driver in the removal action. SU1 = 15, SU2 = 5, SU3 = 51, SU4 = 28, SU5 = 62

A total of 161 sample locations will be assessed.

Changes if any, from Pre-ex SUD:

Spreadsheet-Calculated Numbers of Samples: SU2 =15; SU3 = 15; SU4 = 15 and SU5 = 15.

Scanning MDC (Area Factor) corrected number of samples: SU2 = 542, SU3 = 1573, SU4 = 1131, SU5 = 828

Default 15 foot triangular grid (see Figure 3): Sample locations were selected by overlaying onto the SU a 15-foot triangular plan with a random starting point. The determination of the number of samples is consistent with section 3.7 of the standard VSAP, which provides a default grid spacing for SUs where PU-238 is the primary driver in the removal action. SU2 = 96, SU3 = 89, SU4 = 81, SU5 = 45

A total of 311 sample locations will be assessed for SU2-5.

A5a/146

Item 6b	Calculations/Chem, Std dev, Number of Samples	N/A
	Changes if any, from Pre-ex SUD: None	
Item 7	Grid spacing	From Attachment A, Figure 2, triangular 15 foot grid except SU2 where each sub area (SU2a-SU2e) contain one sample each due to each <100m2
	Changes if any, from Pre-ex SUD: For SU2-5, all use triangular 15 foot grid, with biased samples at small excavations within SU2.	
Item 8	**QA/QC:** Collection of QA/QC samples shall be in accordance with the Standard VSAP, Final, August 2004. Q-002 Chain-of-Custody Procedures Q-003 Documentation Requirements Q-004 Laboratory Data Reduction Q-006 Validation of Laboratory Data Packages Q-007 Data Assessment Q-008 Data Integrity Verification Q-010 Electronic Data Deliverable Format Specifications – MEIMS Std. ... S-001 General Instructions for Field Personnel S-002 Soil Sampling With a Spade and Scoop S-028 Sample Control and Documentation S-029 Guide to Handling, Packaging, and Shipping of Samples and Method Q-002	
Item 9	Bias/judgement samples. For SU2-5, biased samples will be taken in small excavations within SU2. (Additional bias samples are always within the discretion of the EPA)	
Item 10	Not otherwise covered.../ comments Site policy requires performance of onsite soil screening (NaI or germanium) on verification samples slated for offsite analysis and evaluation of the results prior to shipment. This analysis will generally be performed on a split of the verification sample containerized in an EPA dish (approximately 500 mL) but may be performed on the actual verification sample as long as containerization requirements are maintained for the offsite lab. Count time of the analysis will be sufficient to meet the cleanup objectives (COs) of the contaminants of concern (COCs) requiring verification. In-process sampling events (Characterization and RASS samples) will be conducted during the entire PRS remediation. Those samples will undergo gamma spectrometry analysis to guide actions. . On site gamma spec typically provides results for: Co-60, Cs-137, Pb-210, Ra-226, Ac-227 (D), Th-230, Th-232 (D), Pu-238, and Am-241. In addition, any isotopes identified to be greater than their MDA (e.g., U-238, Bi-210m, etc.) will be reported on the analytical results sheet. Any exceedances of the CO associated with any isotope will constitute disposal as contaminated waste and inclusion as a COC."RASS sampling and process knowledge of the remediated areas will be used to determine when the FSS (verification) sampling could be conducted. These samples undergo gamma spectroscopy analysis and, where historical Th230 or U238 locations are above cleanup objectives, samples will be taken and analyzed via alpha spectroscopy Potentially impacted areas where excavated materials are loaded into haulers will be included in an existing or additional survey unit, as appropriate. MARSSIM spreadsheets for Load Out Survey Units shall include the same COCs as the adjacent SU.	

Abo/1/6

Survey Unit Design (SUD)

Final

Project: PRSs 159, 155 – 158, & WD Footprint

Review & Approval

Project Engineer: Karen Arthur _____

Reviewer: James Fontaine CAline for J. Fontaine

Reviewer: _____

Document	Title
Action Memo	*UGL Action Memorandum, Final, September 2003*
RP	*UGLs Removal Plan. Final, April 2004*
WP	*Soil Removal, ELT-MND-105-00, April 2004*
VSAP	*Standard Verification Sampling & Analysis Plan, Final, August 2004*

Changes from Pre-Ex:

D&D Work Plan	*Work Package, SD Building and Surrounding Soils Title II, 17 April 1996*

☐ **Pre-Excavation** or ☒ **Post-Excavation**?

PostEx SUD Partial III
(includes SU6 of PRS 159 only)

Summary of Changes (for Post-Excavation SUDs ONLY) (see following pages for details)	YES	NO	Comment
1. Did the COC(s) change?	X		COC for SU6 is Pu-238, see Item 10
2. Did the grid size or N change?	X		New SUs
3. Did the classification change?		X	
4. Were bias/judgmental samples collected?		X	
5. Other significant change?	X		New SU

9/11/19

SUD Worksheet

Acronyms

AM	Action Memo
BGS	Below Ground Surface
CO	Cleanup Objective
COC	Contaminant of Concern
ELT	Earthline Technologies (Subcontractor for the UGL project)
EPA	Environmental Protection Agency
FSS	Final Status Survey
HS	Hot Spot
M^2	Square Meters
MARSSIM	Multi – Agency Radiation Survey and Site Investigation Manual
MDC	Minimum Detectable Concentration
MEIMS	Mound Environmental Information Management System
MND	Mound
OP	Operation
PCi/g	pico (10^{-12}) curies per gram
Pu238	Plutonium 238
PRS	Potential Release Site
QA/QC	Quality Assurance/Quality Control
RadCon	Radiological Control
RASS	Remedial Action Support Survey
SD	Sanitary Disposal (SD) Building
Std dev	Standard Deviation
SU	Survey Unit
SUD	Survey Unit Design
Th230, Th232	Thorium 230, Thorium 232
U238	Uranium 238
UGL	Underground Lines
VSAP	Verification Sampling and Analysis Plan
WD	Waste Disposal (WD) Building
WDA	Waste Disposal Annex (WDA) Building
WP	Work Package

AG 2/1/06

Item 1

Summary of historic information relevant to this SUD:

The Removal Plan associated with this SUD addressed identified contamination areas with contaminants of concern (COCs) above the cleanup objectives (COs).

PRSs 155-159 are all PRSs associated with the old SD Plant. PRS 159 is identified in the UGL Action Memo, Table 2, as "Area 4A, Sewage Sludge Drying Pits / Removed 1997." Figure 1 from the UGL AM, attached herein, also designated PRS 159 as the overall boundary identifier (designated by a dashed line) which includes these PRSs as well as the WD building footprint. Removals were previously performed in these areas but verification/confirmation was not performed. No COCs are listed in the UGL AM for PRSs 155-158. Contaminants will be those identified during RadCon soil surveying activities and added to the Post Excavation SUD. Per the UGL AM, where no remediation work is required, e. g., the previously removed (~1997) SD Sludge Drying Pits, only verification sampling is required. COCs for PRS 159 are Pu238 and Th232. In addition, several historical samples within the PRS 159 boundaries are above cleanup objectives and will be removed as part of the remediation effort. See Figure 2, Anticipated Limits of Excavation, PRS 159 Area, which defines the remediation effort. See also Item 10 which describes actions taken in the field to ensure all contamination has been discovered and removed.

WD Footprint is an area of soil removal below the former WD Building, which was removed in the spring of 2004.

Although PRS 413 is located within the PRS 159 Area, a separate SUD is planned for that PRS because it is a chemical (creosote) PRS and not a radiological PRS. Subsequent to the removal action and verification sampling described in this (PRS159) SUD, verification of PRS 413 will be accomplished.

Changes if any, from Pre-ex SUD:

The 23'w x 65'l x 12'h concrete shelf, which originally was installed to support influent tanks for WD Building, has been added to this PRS 159 SUD as SU6 for verification.

Item 2

Summary of historic **data** relevant to SU:

PRS 155-158: Authorizing Document: UGL Action Memo, Final, September 2003. No contaminants listed in the UGL AM; contaminants will be those identified during RadCon soil surveying activities.

PRS 159: Authorizing Document: UGL Action Memo, Final September 2003. Contaminants include: Pu238 and Th232. Historical samples indicate contamination varies from the surface to ten feet bgs.

WD Footprint: Authorizing Document: UGL Action Memo, Final, September 2003. No contaminants listed in the UGL AM. Pre-excavation soil sampling indicates COCs Pu-238 and Th-230. In addition, historical samples above cleanup objectives indicate the addition of TH232. (see SUs 3-5)

RASS samples will be collected during the removals. Any contaminant found in the RASS sampling process above the CO will be added to the list of COCs.

Item 3a

COC	BASIS	(pCi/g) CO	HS	Offsite Analysis & Compendium Method: gamma (A-015)	Iso Pu (A-012)	Iso Th (A-012)	Iso U (A-012)
Pu238	*Based on UGL AM: PRS 159*	55	165.13		X		

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Th232	*Based on UGL AM: PRS 159*	2.1	3.5			X	
Th230	*WD footprint (SUs 3-5) based on pre-excavation soil samples*	2.8	4.6			X	

Analyses are to be performed per Mound Methods Compendium and COs (for surface samples/analysis i.e., bedrock, asphalt, concrete) as applicable. Compendium Method A-012 is Isotopic Uranium, Isotopic Plutonium, and Isotopic Thorium by Alpha Spectrometry. Surface samples/analysis are to be in accordance with MD-80036: OP 10001, 10002, 30005, 30007, and 30040. Hard surfaces will be swiped and gross alpha and beta measurements will be performed and compared to the most restrictive COC in Mound 2000 Work Plan Appendix A Table 1 (NUREG 1.86 Regulatory Guide). If the location fails to meet the most restrictive criteria then it will be sent to alpha spec for determination of the COC so the applicable, instead of the most restrictive, criteria can be applied.

Changes if any, from Pre-ex SUD:
COC for SU6 is Pu-238. See Item 10 for details on COC justification.

Item 3b

Chem basis for std dev, AM COCs/New COCs NA

Item 4

Classify Areas & provide justification

All five SUs are Class 1.

Selection	Class	Scan Coverage guidelines
X	1	100%
	2	10-90%
	3	Judgmental

Changes if any, from Pre-ex SUD: SU6 has been added as Class I.

Item 5

Subdivide areas into SUs

See Attachment A for Figures

See Attachment B for Historical Sample Data – Standard Deviations for COCs. The data set is historical data without results that exceed COs in order to mimic the "as-left" condition.

See Attachment C for MARSSIM Survey Unit Spreadsheets

This SUD consists of five SUs (see attached Figure 3): (SUs were selected based on physical location and common COCs.)

SU1 covers the former sludge drying beds and drum removal area of PRS 159, and is approximately 4220 sq. ft. COCs: Pu238 and Th232.
SU2 covers the southern portion of PRS 159, and is approximately 500 sq. ft. (Five small dig locations.). COCs: Pu238 and Th232.
SU3 covers the western portion of WD Building including the old SD Plant Area & soil northwest of WDA. This survey unit includes PRSs 155-158 and is approximately 11,900sq. ft. COCs: Pu238, Th230, and Th232.
SU4 covers the central portion of WD Building, including the soil area south of the building. This area is approximately 6930 sq. ft. COCs: Same as SU3.
SU5 covers the eastern portion of WD Building and is approximately 13,980 sq. ft. COCs: Same as SU3.

Changes if any, from Pre-ex SUD:

SU6 Surface areas are: top=1,523 sq. ft., south face=781 sq. ft., west face=141 sq. ft. for a total of 2,445 sq. ft. COC is Pu-238.

(See Appendix II Table 1 for further comparison between Pre-ex and Post ex SUD)

Item 6a	Calculations / Rad 1. Calculate the (s) for each COC listed above: See Attachment C. 2. Number of Samples (N): See Attachment C. Spreadsheet-Calculated Numbers of Samples: SU1 = 12; SU2 =12; SU3 = 15; SU4 = 15 and SU5 = 15. Scanning MDC (Area Factor) corrected number of samples: SU1 = 244, SU2 = 16, SU3 = 1074, SU4 = 504, SU5 = 1250 Default 15 foot triangular grid (see Figure 3): Sample locations were selected by overlaying onto the SU a 15-foot triangular plan with a random starting point. The determination of the number of samples is consistent with section 3.7 of the standard VSAP, which provides a default grid spacing for SUs where PU-238 is the primary driver in the removal action. SU1 = 15, SU2 = 5, SU3 = 51, SU4 = 28, SU5 = 62 A total of 161 sample locations will be assessed.
	Changes if any, from Pre-ex SUD: The SU6 concrete shelf will be considered as bedrock and per the Standard Verification Sampling and Analysis Plan (sVSAP), Section 4.4, final verification methods are detailed in this SUD. The surface to be scanned is rough, uneven concrete and appropriate scan distance cannot be maintained. The count time for 100% scan coverage would take at least 60 hrs; even if the area to be surveyed were level. Therefore, a scan surrogate will be used, similar to the one performed in PRS 67, in lieu of scanning. The surrogate will consist of a 15' triangular grid for swipe and integrated count, to be offset from the 15' triangular grid for verification. A total of 28 sample locations will be surveyed. All locations will be considered verification points. See Item 10 for details.
Item 6b	Calculations/Chem, Std dev, Number of Samples N/A
	Changes if any, from Pre-ex SUD: None
Item 7	Grid spacing From Attachment A, Figure 2, triangular 15 foot grid except SU2 where each sub area (SU2a-SU2e) contain one sample each due to each <100m2
	Changes if any, from Pre-ex SUD: For SU6, two offset triangular 15-foot grids will be used. See Item 6a Change Box above.

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Item 8	**QA/QC:** Collection of QA/QC samples shall be in accordance with the Standard VSAP, Final, August 2004. Q-002 Chain-of-Custody Procedures Q-003 Documentation Requirements Q-004 Laboratory Data Reduction Q-006 Validation of Laboratory Data Packages Q-007 Data Assessment Q-008 Data Integrity Verification Q-010 Electronic Data Deliverable Format Specifications – MEIMS Std. ... S-001 General Instructions for Field Personnel S-002 Soil Sampling With a Spade and Scoop S-028 Sample Control and Documentation S-029 Guide to Handling, Packaging, and Shipping of Samples and Method Q-002
Item 9	Bias samples are always within the discretion of the EPA
Item 10	Not otherwise covered.../ comments Site policy requires performance of onsite soil screening (NaI or germanium) on verification samples slated for offsite analysis and evaluation of the results prior to shipment. This analysis will generally be performed on a split of the verification sample containerized in an EPA dish (approximately 500 mL) but may be performed on the actual verification sample as long as containerization requirements are maintained for the offsite lab. Count time of the analysis will be sufficient to meet the cleanup objectives (COs) of the contaminants of concern (COCs) requiring verification. In-process sampling events (Characterization and RASS samples) will be conducted during the entire PRS remediation. Those samples will undergo gamma spectrometry analysis to guide actions. . On site gamma spec typically provides results for: Co-60, Cs-137, Pb-210, Ra-226, Ac-227 (D), Th-230, Th-232 (D), Pu-238, and Am-241. In addition, any isotopes identified to be greater than their MDA (e.g., U-238, Bi-210m, etc.) will be reported on the analytical results sheet. Any exceedances of the CO associated with any isotope will constitute disposal as contaminated waste and inclusion as a COC."RASS sampling and process knowledge of the remediated areas will be used to determine when the FSS (verification) sampling could be conducted. These samples undergo gamma spectroscopy analysis and, where historical Th230 or U238 locations are above cleanup objectives, samples will be taken and analyzed via alpha spectroscopy Potentially impacted areas where excavated materials are loaded into haulers will be included in an existing or additional survey unit, as appropriate. MARSSIM spreadsheets for Load Out Survey Units shall include the same COCs as the adjacent SU.
	Changes if any, from Pre-ex SUD: Per the sVSAP Section 5.3, Bedrock Surfaces "Fixed measurements for individual isotopes should be compared to hot spot criteria ("Maximum Allowable Total Residual Surface Contamination" specified in DOE Order 5400.5 and Mound 2000 Work Plan). Fixed measurements for individual isotopes should be used to perform an SOR Sign Test in accordance with Section 2.2 of this Standard VSAP. The DCGLs for individual isotopes should be the "Average Allowable Total Residual Surface Contamination" specified in DOE Order 4500.5 and Mound 2000 Work Plan. (See Mound 2000 Table 1 in Appendix II.) The surface area will be cleaned and at those locations a swipe and direct, integrated count with a Ludlum 2360 will be taken for alpha contamination. All contamination is assumed to be Pu-238, the most likely and most conservative contaminate. The results will be presented to the Core Team for concurrence or determination of further action (Refer to Appendix II, Mound 2000 Table 1, Group 1 limits).

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APPENDIX D

BACKFILL PACKAGES

- SUs 2-5
- SU6

STD VSAP BACKFILL INFO

This information will be represented in the Data Report.

For: (PRS 159+) UGL VII SUs 2-5

Checklist:

(per Section 5.6 of Std VSAP, Final, Aug 04)

- ☑ final Graphic [EXHIBIT 1]
  (show sample locations & note any >CO and/or >HS)
- ☑ sample results [EXHIBIT 2]
  (show DLs, HS, COs, and COC std deviation(s))
- ☑ recalc of N [EXHIBIT 3]
- ☑ preliminary data were reviewed
  (Data Review & Validation Report will be submitted with the Data Report)
- ☑ Sign test & 95%UCL (per SU) [EXHIBIT 4]
  (not required if all results <CO, see pg 19/21 of VSAP)
- ☑ retro curve

From: (sign/date) 20 April 06

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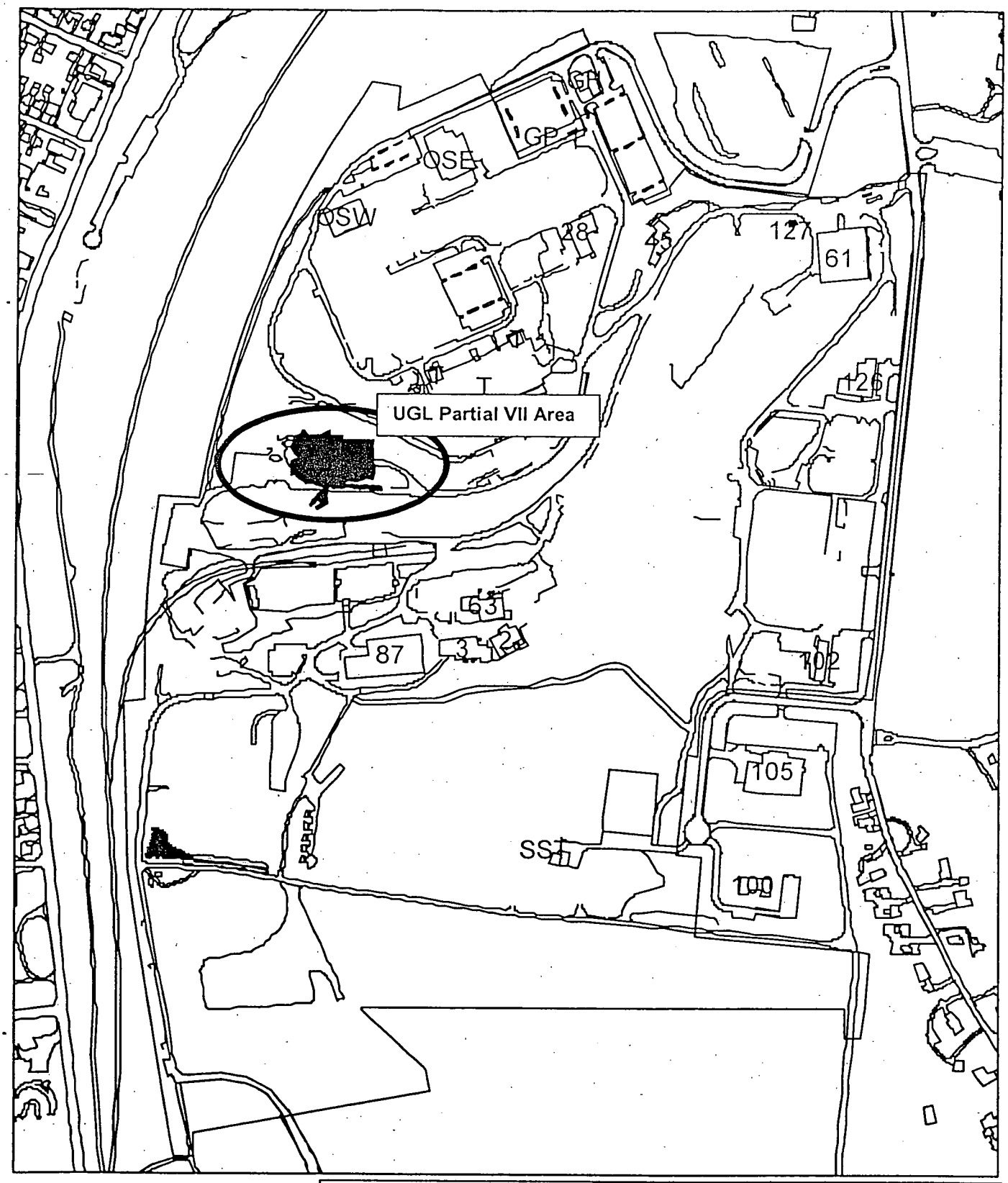

Scale in feet

0 200400 600 8001000

N ↑

Figure 1:
Location of UGL Partial VII Area

EXHIBIT 1
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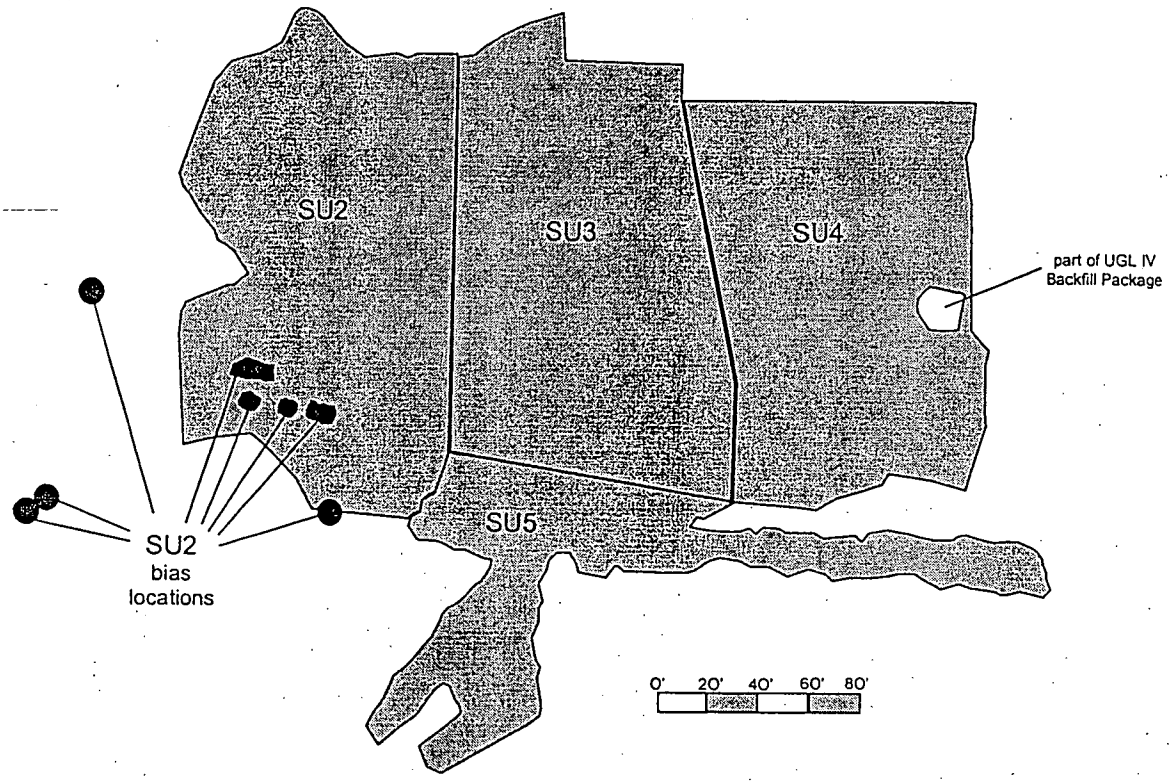


Figure 2: SU Overview

EXHIBIT 1

A70/146

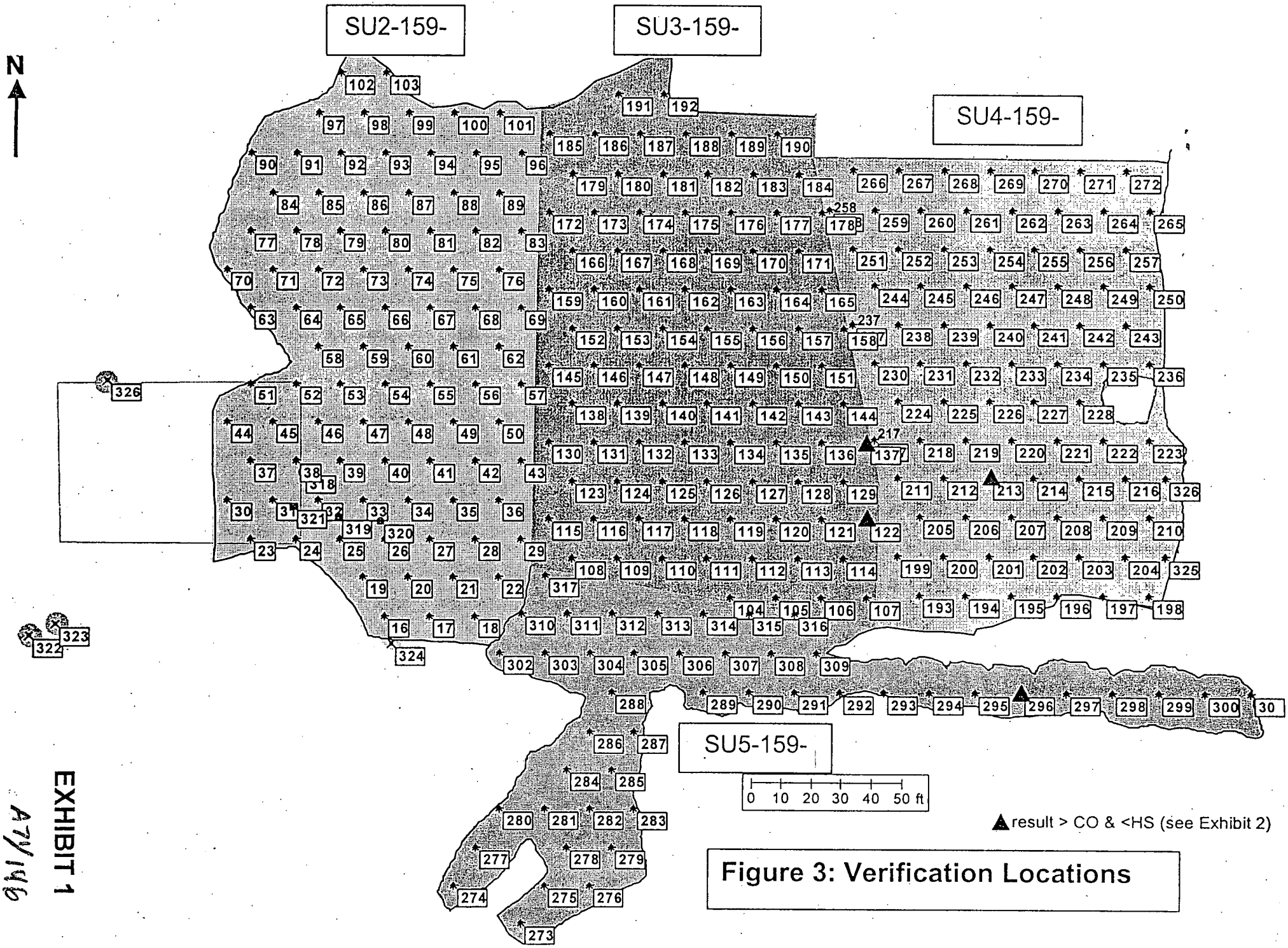


Figure 3: Verification Locations

EXHIBIT 1

A7/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU2-PRS159-020	1.65		Plutonium-238	0.05	1.650
SU2-PRS159-021	2.69		Plutonium-238	0.04	2.690
SU2-PRS159-022	4.62		Plutonium-238	0.04	4.620
SU2-PRS159-023	3.87		Plutonium-238	0.05	3.870
SU2-PRS159-024	3.56		Plutonium-238	0.05	3.560
SU2-PRS159-025	1.95		Plutonium-238	0.04	1.950
SU2-PRS159-026	5.24		Plutonium-238	0.04	5.240
SU2-PRS159-027	3.43		Plutonium-238	0.04	3.430
SU2-PRS159-028	3.76		Plutonium-238	0.04	3.760
SU2-PRS159-029	0.019	U	Plutonium-238	0.043	0.019
SU2-PRS159-030	0.86		Plutonium-238	0.03	0.860
SU2-PRS159-031	2.3		Plutonium-238	0.03	2.300
SU2-PRS159-032	3.87		Plutonium-238	0.03	3.870
SU2-PRS159-033	7.64		Plutonium-238	0.03	7.640
SU2-PRS159-034	2.53		Plutonium-238	0.03	2.530
SU2-PRS159-035	1.96		Plutonium-238	0.03	1.960
SU2-PRS159-036	3.9		Plutonium-238	0.03	3.900
SU2-PRS159-037	2.57		Plutonium-238	0.03	2.570
SU2-PRS159-038	4.14		Plutonium-238	0.03	4.140
SU2-PRS159-039	3.54		Plutonium-238	0.02	3.540
SU2-PRS159-040	1.92		Plutonium-238	0.03	1.920
SU2-PRS159-041	2.01		Plutonium-238	0.03	2.010
SU2-PRS159-042	0.71		Plutonium-238	0.03	0.710
SU2-PRS159-043	0.31		Plutonium-238	0.04	0.310
SU2-PRS159-044	3.1		Plutonium-238	0.03	3.100
SU2-PRS159-045	2.23		Plutonium-238	0.03	2.230
SU2-PRS159-046	2.12		Plutonium-238	0.05	2.120
SU2-PRS159-047	0.016	U	Plutonium-238	0.029	0.016
SU2-PRS159-048	0.007	U	Plutonium-238	0.025	0.007
SU2-PRS159-049	0.009	U	Plutonium-238	0.024	0.009
SU2-PRS159-050	0.273		Plutonium-238	0.03	0.273
SU2-PRS159-051	2.07		Plutonium-238	0.03	2.070
SU2-PRS159-052	3.02		Plutonium-238	0.03	3.020
SU2-PRS159-053	2.78		Plutonium-238	0.03	2.780
SU2-PRS159-054	0.78		Plutonium-238	0.03	0.780
SU2-PRS159-055	0.017	U	Plutonium-238	0.027	0.017
SU2-PRS159-056	-0.001	U	Plutonium-238	0.028	0.014
SU2-PRS159-057	0.026	U	Plutonium-238	0.037	0.026
SU2-PRS159-058	0.068	J	Plutonium-238	0.033	0.068
SU2-PRS159-059	14.8		Plutonium-238	0.04	14.800
SU2-PRS159-060	0.113		Plutonium-238	0.041	0.113
SU2-PRS159-061	0.002	U	Plutonium-238	0.051	0.002
SU2-PRS159-062	0.006	U	Plutonium-238	0.034	0.006
SU2-PRS159-063	1.13		Plutonium-238	0.05	1.130
SU2-PRS159-064	10.9		Plutonium-238	0.02	10.900
SU2-PRS159-065	0.168		Plutonium-238	0.026	0.168
SU2-PRS159-066	0.149		Plutonium-238	0.04	0.149
SU2-PRS159-067	5.62		Plutonium-238	0.03	5.620
SU2-PRS159-068	0.013	U	Plutonium-238	0.03	0.013
SU2-PRS159-069	1.54		Plutonium-238	0.03	1.540
SU2-PRS159-070	1.18		Plutonium-238	0.02	1.180
SU2-PRS159-071	0.81		Plutonium-238	0.03	0.810
SU2-PRS159-072	4.29		Plutonium-238	0.04	4.290
SU2-PRS159-073	0.138		Plutonium-238	0.029	0.138
SU2-PRS159-076	25.1		Plutonium-238	0.03	25.100
SU2-PRS159-077	0.248		Plutonium-238	0.024	0.248
SU2-PRS159-078	0.058	J	Plutonium-238	0.032	0.058
SU2-PRS159-079	14.6		Plutonium-238	0.02	14.600
SU2-PRS159-080	0.004	U	Plutonium-238	0.032	0.004
SU2-PRS159-081	0.046	J	Plutonium-238	0.03	0.046
SU2-PRS159-082	11.7		Plutonium-238	0.04	11.700
SU2-PRS159-083	0.41		Plutonium-238	0.04	0.410
SU2-PRS159-084	1.79		Plutonium-238	0.04	1.790
SU2-PRS159-085	2.72		Plutonium-238	0.04	2.720
SU2-PRS159-086	0.364		Plutonium-238	0.026	0.364
SU2-PRS159-087	0.049	J	Plutonium-238	0.031	0.049
SU2-PRS159-088	1.92		Plutonium-238	0.04	1.920
SU2-PRS159-089	0.48		Plutonium-238	0.02	0.480
SU2-PRS159-090	26.4		Plutonium-238	0.06	26.400

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2
A72/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU2-PRS159-091	2.36		Plutonium-238	0.03	2.360
SU2-PRS159-092	0.061	J	Plutonium-238	0.029	0.061
SU2-PRS159-093	3.7		Plutonium-238	0.08	3.700
SU2-PRS159-094	1.82		Plutonium-238	0.03	1.820
SU2-PRS159-095	1.19		Plutonium-238	0.03	1.190
SU2-PRS159-096	0.68		Plutonium-238	0.03	0.680
SU2-PRS159-097	7.8		Plutonium-238	0.03	7.800
SU2-PRS159-098	6.01		Plutonium-238	0.06	6.010
SU2-PRS159-099	3.91		Plutonium-238	0.04	3.910
SU2-PRS159-100	5		Plutonium-238	0.04	5.000
SU2-PRS159-101	0.38		Plutonium-238	0.05	0.380
SU2-PRS159-102	48		Plutonium-238	0.06	48.000
SU2-PRS159-103	2.2		Plutonium-238	0.03	2.200
SU2-PRS159-318	7.72		Plutonium-238	0.04	7.720
SU2-PRS159-319	0.71		Plutonium-238	0.03	0.710
SU2-PRS159-320	27.6		Plutonium-238	0.03	27.600
SU2-PRS159-321	0.277		Plutonium-238	0.028	0.277
SU2-PRS159-322	0.43		Plutonium-238	0.03	0.430
SU2-PRS159-323	18.8		Plutonium-238	0.02	18.800
SU2-PRS159-324	0.348		Plutonium-238	0.035	0.348
SU2-PRS159-325	1.43		Plutonium-238	0.03	1.430
SU2 Pu-238				Standard Deviation	7.234
				Max Result	48.000
				Cleanup Objective	55.000
				Hot Spot Criteria	165.000

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2
A73/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU2-PRS159-020	0.61		Thorium-230	0.03	0.610
SU2-PRS159-021	0.56		Thorium-230	0.03	0.560
SU2-PRS159-022	0.47		Thorium-230	0.04	0.470
SU2-PRS159-023	0.36		Thorium-230	0.04	0.360
SU2-PRS159-024	0.246		Thorium-230	0.032	0.246
SU2-PRS159-025	0.56		Thorium-230	0.03	0.560
SU2-PRS159-026	0.53		Thorium-230	0.02	0.530
SU2-PRS159-027	0.48		Thorium-230	0.04	0.480
SU2-PRS159-028	1.04		Thorium-230	0.04	1.040
SU2-PRS159-029	0.99		Thorium-230	0.04	0.990
SU2-PRS159-030	0.5		Thorium-230	0.02	0.500
SU2-PRS159-031	0.53		Thorium-230	0.03	0.530
SU2-PRS159-032	0.53		Thorium-230	0.03	0.530
SU2-PRS159-033	0.97		Thorium-230	0.03	0.970
SU2-PRS159-034	0.319		Thorium-230	0.031	0.319
SU2-PRS159-035	0.77		Thorium-230	0.04	0.770
SU2-PRS159-036	0.74		Thorium-230	0.02	0.740
SU2-PRS159-037	0.49		Thorium-230	0.03	0.490
SU2-PRS159-038	0.81		Thorium-230	0.02	0.810
SU2-PRS159-039	0.85		Thorium-230	0.04	0.850
SU2-PRS159-040	1.16		Thorium-230	0.03	1.160
SU2-PRS159-041	0.87		Thorium-230	0.07	0.870
SU2-PRS159-042	0.77		Thorium-230	0.03	0.770
SU2-PRS159-043	0.73		Thorium-230	0.1	0.730
SU2-PRS159-044	0.56		Thorium-230	0.04	0.560
SU2-PRS159-045	0.55		Thorium-230	0.01	0.550
SU2-PRS159-046	0.45		Thorium-230	0.07	0.450
SU2-PRS159-047	0.61		Thorium-230	0.05	0.610
SU2-PRS159-048	0.85		Thorium-230	0.05	0.850
SU2-PRS159-049	1.15		Thorium-230	0.05	1.150
SU2-PRS159-050	0.77		Thorium-230	0.06	0.770
SU2-PRS159-051	0.36		Thorium-230	0.05	0.360
SU2-PRS159-052	0.33		Thorium-230	0.04	0.330
SU2-PRS159-053	0.8		Thorium-230	0.05	0.800
SU2-PRS159-054	0.91		Thorium-230	0.05	0.910
SU2-PRS159-055	0.99		Thorium-230	0.06	0.990
SU2-PRS159-056	1		Thorium-230	0.04	1.000
SU2-PRS159-057	1.05		Thorium-230	0.06	1.050
SU2-PRS159-058	0.4		Thorium-230	0.08	0.400
SU2-PRS159-059	0.37		Thorium-230	0.04	0.370
SU2-PRS159-060	0.147		Thorium-230	0.043	0.147
SU2-PRS159-061	0.26		Thorium-230	0.03	0.260
SU2-PRS159-062	0.9		Thorium-230	0.04	0.900
SU2-PRS159-063	0.51		Thorium-230	0.07	0.510
SU2-PRS159-064	0.55		Thorium-230	0.05	0.550
SU2-PRS159-065	1.2		Thorium-230	0.04	1.200
SU2-PRS159-066	0.28		Thorium-230	0.04	0.280
SU2-PRS159-067	0.93		Thorium-230	0.05	0.930
SU2-PRS159-068	0.94		Thorium-230	0.05	0.940
SU2-PRS159-069	0.96		Thorium-230	0.04	0.960
SU2-PRS159-070	0.94		Thorium-230	0.06	0.940
SU2-PRS159-071	0.46		Thorium-230	0.04	0.460
SU2-PRS159-072	0.75		Thorium-230	0.06	0.750
SU2-PRS159-073	0.85		Thorium-230	0.05	0.850
SU2-PRS159-076	1.26		Thorium-230	0.05	1.260
SU2-PRS159-077	1.08		Thorium-230	0.03	1.080
SU2-PRS159-078	1.02		Thorium-230	0.03	1.020
SU2-PRS159-079	0.51		Thorium-230	0.04	0.510
SU2-PRS159-080	0.89		Thorium-230	0.03	0.890
SU2-PRS159-081	0.93		Thorium-230	0.05	0.930
SU2-PRS159-082	1.31		Thorium-230	0.05	1.310
SU2-PRS159-083	1.14		Thorium-230	0.05	1.140
SU2-PRS159-084	0.94		Thorium-230	0.05	0.940
SU2-PRS159-085	0.79		Thorium-230	0.04	0.790
SU2-PRS159-086	0.88		Thorium-230	0.06	0.880
SU2-PRS159-087	0.95		Thorium-230	0.06	0.950
SU2-PRS159-088	0.93		Thorium-230	0.07	0.930
SU2-PRS159-089	0.83		Thorium-230	0.07	0.830
SU2-PRS159-090	0.68		Thorium-230	0.14	0.680

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2
A74/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU2-PRS159-091	0.55		Thorium-230	0.03	0.550
SU2-PRS159-092	0.67		Thorium-230	0.05	0.670
SU2-PRS159-093	0.96		Thorium-230	0.14	0.960
SU2-PRS159-094	0.67		Thorium-230	0.2	0.670
SU2-PRS159-095	1.03		Thorium-230	0.03	1.030
SU2-PRS159-096	0.9		Thorium-230	0.05	0.900
SU2-PRS159-097	0.99		Thorium-230	0.06	0.990
SU2-PRS159-098	1.41		Thorium-230	0.05	1.410
SU2-PRS159-099	1.17		Thorium-230	0.07	1.170
SU2-PRS159-100	1.14		Thorium-230	0.04	1.140
SU2-PRS159-101	1.16		Thorium-230	0.06	1.160
SU2-PRS159-102	0.67		Thorium-230	0.11	0.670
SU2-PRS159-103	1.49		Thorium-230	0.02	1.490
SU2-PRS159-318	0.96		Thorium-230	0.02	0.960
SU2-PRS159-319	0.54		Thorium-230	0.04	0.540
SU2-PRS159-320	0.65		Thorium-230	0.06	0.650
SU2-PRS159-321	1.23		Thorium-230	0.02	1.230
SU2-PRS159-322	0.8		Thorium-230	0.03	0.800
SU2-PRS159-323	0.248		Thorium-230	0.045	0.248
SU2-PRS159-324	1.1		Thorium-230	0.03	1.100
SU2-PRS159-325	0.79		Thorium-230	0.06	0.790
SU2 Th-230				Standard Deviation	0.292
				Max Result	1.490
				Cleanup Objective	2.800
				Hot Spot Criteria	4.600

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A75/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU2-PRS159-020	0.32		Thorium-232	0.02	0.320
SU2-PRS159-021	0.255		Thorium-232	0.027	0.255
SU2-PRS159-022	0.241		Thorium-232	0.033	0.241
SU2-PRS159-023	0.144		Thorium-232	0.032	0.144
SU2-PRS159-024	0.123		Thorium-232	0.02	0.123
SU2-PRS159-025	0.35		Thorium-232	0.03	0.350
SU2-PRS159-026	0.256		Thorium-232	0.034	0.256
SU2-PRS159-027	0.274		Thorium-232	0.015	0.274
SU2-PRS159-028	0.62		Thorium-232	0.03	0.620
SU2-PRS159-029	1.05		Thorium-232	0.05	1.050
SU2-PRS159-030	0.194		Thorium-232	0.022	0.194
SU2-PRS159-031	0.255		Thorium-232	0.019	0.255
SU2-PRS159-032	0.4		Thorium-232	0.03	0.400
SU2-PRS159-033	0.69		Thorium-232	0.02	0.690
SU2-PRS159-034	0.151		Thorium-232	0.024	0.151
SU2-PRS159-035	0.72		Thorium-232	0.03	0.720
SU2-PRS159-036	0.61		Thorium-232	0.02	0.610
SU2-PRS159-037	0.276		Thorium-232	0.028	0.276
SU2-PRS159-038	0.358		Thorium-232	0.014	0.358
SU2-PRS159-039	0.65		Thorium-232	0.03	0.650
SU2-PRS159-040	0.95		Thorium-232	0.03	0.950
SU2-PRS159-041	1.09		Thorium-232	0.03	1.090
SU2-PRS159-042	0.8		Thorium-232	0.03	0.800
SU2-PRS159-043	0.91		Thorium-232	0.1	0.910
SU2-PRS159-044	0.38		Thorium-232	0.04	0.380
SU2-PRS159-045	0.307		Thorium-232	0.013	0.307
SU2-PRS159-046	0.085	J	Thorium-232	0.074	0.085
SU2-PRS159-047	0.36		Thorium-232	0.04	0.360
SU2-PRS159-048	1.01		Thorium-232	0.04	1.010
SU2-PRS159-049	1.71		Thorium-232	0.07	1.710
SU2-PRS159-050	1.02		Thorium-232	0.04	1.020
SU2-PRS159-051	0.166		Thorium-232	0.07	0.166
SU2-PRS159-052	0.214		Thorium-232	0.04	0.214
SU2-PRS159-053	0.52		Thorium-232	0.05	0.520
SU2-PRS159-054	1.02		Thorium-232	0.07	1.020
SU2-PRS159-055	1.11		Thorium-232	0.07	1.110
SU2-PRS159-056	1.29		Thorium-232	0.06	1.290
SU2-PRS159-057	1.28		Thorium-232	0.06	1.280
SU2-PRS159-058	0.17		Thorium-232	0.1	0.170
SU2-PRS159-059	0.177		Thorium-232	0.045	0.177
SU2-PRS159-060	0.018	U	Thorium-232	0.054	0.018
SU2-PRS159-061	0.008	U	Thorium-232	0.044	0.008
SU2-PRS159-062	1.24		Thorium-232	0.06	1.240
SU2-PRS159-063	0.52		Thorium-232	0.04	0.520
SU2-PRS159-064	0.35		Thorium-232	0.05	0.350
SU2-PRS159-065	0.94		Thorium-232	0.03	0.940
SU2-PRS159-066	0.046	U	Thorium-232	0.048	0.046
SU2-PRS159-067	0.78		Thorium-232	0.04	0.780
SU2-PRS159-068	1.42		Thorium-232	0.04	1.420
SU2-PRS159-069	1.02		Thorium-232	0.03	1.020
SU2-PRS159-070	0.66		Thorium-232	0.06	0.660
SU2-PRS159-071	0.26		Thorium-232	0.03	0.260
SU2-PRS159-072	0.48		Thorium-232	0.03	0.480
SU2-PRS159-073	0.99		Thorium-232	0.05	0.990
SU2-PRS159-076	1.04		Thorium-232	0.05	1.040
SU2-PRS159-077	1.09		Thorium-232	0.03	1.090
SU2-PRS159-078	1.17		Thorium-232	0.05	1.170
SU2-PRS159-079	0.36		Thorium-232	0.03	0.360
SU2-PRS159-080	1		Thorium-232	0.04	1.000
SU2-PRS159-081	1.22		Thorium-232	0.03	1.220
SU2-PRS159-082	1.22		Thorium-232	0.03	1.220
SU2-PRS159-083	1.2		Thorium-232	0.05	1.200
SU2-PRS159-084	1.29		Thorium-232	0.03	1.290
SU2-PRS159-085	0.33		Thorium-232	0.04	0.330
SU2-PRS159-086	1.06		Thorium-232	0.05	1.060
SU2-PRS159-087	1.18		Thorium-232	0.06	1.180
SU2-PRS159-088	1.1		Thorium-232	0.04	1.100
SU2-PRS159-089	1.05		Thorium-232	0.06	1.050
SU2-PRS159-090	0.98		Thorium-232	0.11	0.980

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2
A76/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU2-PRS159-091	0.35		Thorium-232	0.02	0.350
SU2-PRS159-092	1.07		Thorium-232	0.04	1.070
SU2-PRS159-093	1.22		Thorium-232	0.11	1.220
SU2-PRS159-094	0.96		Thorium-232	0.2	0.960
SU2-PRS159-095	1.29		Thorium-232	0.05	1.290
SU2-PRS159-096	1.15		Thorium-232	0.02	1.150
SU2-PRS159-097	0.92		Thorium-232	0.05	0.920
SU2-PRS159-098	0.86		Thorium-232	0.03	0.860
SU2-PRS159-099	1.52		Thorium-232	0.07	1.520
SU2-PRS159-100	1.37		Thorium-232	0.06	1.370
SU2-PRS159-101	0.96		Thorium-232	0.04	0.960
SU2-PRS159-102	0.93		Thorium-232	0.09	0.930
SU2-PRS159-103	0.74		Thorium-232	0.03	0.740
SU2-PRS159-318	0.304		Thorium-232	0.028	0.304
SU2-PRS159-319	0.219		Thorium-232	0.024	0.219
SU2-PRS159-320	0.62		Thorium-232	0.08	0.620
SU2-PRS159-321	0.85		Thorium-232	0.03	0.850
SU2-PRS159-322	1.05		Thorium-232	0.05	1.050
SU2-PRS159-323	0.139		Thorium-232	0.041	0.139
SU2-PRS159-324	0.51		Thorium-232	0.04	0.510
SU2-PRS159-325	1.04		Thorium-232	0.04	1.040
SU2 Th-232				Standard Deviation	0.427
				Max Result	1.710
				Cleanup Objective	2.100
				Hot Spot Criteria	3.500

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

ATT/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU3-PRS159-104	0.105		Plutonium-238	0.029	0.105
SU3-PRS159-105	0.56		Plutonium-238	0.06	0.560
SU3-PRS159-106	0.69		Plutonium-238	0.03	0.690
SU3-PRS159-107	0.03	J	Plutonium-238	0.028	0.030
SU3-PRS159-108	0.114		Plutonium-238	0.054	0.114
SU3-PRS159-109	0.48		Plutonium-238	0.08	0.480
SU3-PRS159-110	1.27		Plutonium-238	0.06	1.270
SU3-PRS159-111	0.5		Plutonium-238	0.06	0.500
SU3-PRS159-112	0.22		Plutonium-238	0.06	0.220
SU3-PRS159-113	1.25		Plutonium-238	0.07	1.250
SU3-PRS159-114	0.64		Plutonium-238	0.05	0.640
SU3-PRS159-115	-0.009	U	Plutonium-238	0.056	0.028
SU3-PRS159-116	0.014	U	Plutonium-238	0.064	0.014
SU3-PRS159-117	0.109		Plutonium-238	0.051	0.109
SU3-PRS159-118	0.157		Plutonium-238	0.055	0.157
SU3-PRS159-119	0.109		Plutonium-238	0.065	0.109
SU3-PRS159-120	2.21		Plutonium-238	0.06	2.210
SU3-PRS159-121	0.8		Plutonium-238	0.06	0.800
SU3-PRS159-122	**87**		**Plutonium-238**	**0.05**	**87.000**
SU3-PRS159-123	0.03	U	Plutonium-238	0.054	0.030
SU3-PRS159-124	-0.023	U	Plutonium-238	0.084	0.042
SU3-PRS159-125	3.03		Plutonium-238	0.05	3.030
SU3-PRS159-126	0.119		Plutonium-238	0.079	0.119
SU3-PRS159-127	0.91		Plutonium-238	0.06	0.910
SU3-PRS159-128	8.2		Plutonium-238	0.09	8.200
SU3-PRS159-129	42		Plutonium-238	0.08	42.000
SU3-PRS159-130	0.018	U	Plutonium-238	0.026	0.018
SU3-PRS159-131	2.94		Plutonium-238	0.04	2.940
SU3-PRS159-132	0.006	U	Plutonium-238	0.035	0.006
SU3-PRS159-133	0.316		Plutonium-238	0.035	0.316
SU3-PRS159-134	0.274		Plutonium-238	0.033	0.274
SU3-PRS159-135	15.8		Plutonium-238	0.05	15.800
SU3-PRS159-136	25.2		Plutonium-238	0.08	25.200
SU3-PRS159-137	**149**		**Plutonium-238**	**0.1**	**149.000**
SU3-PRS159-138	10		Plutonium-238	0.03	10.000
SU3-PRS159-139	0.003	U	Plutonium-238	0.05	0.003
SU3-PRS159-140	1.51		Plutonium-238	0.03	1.510
SU3-PRS159-141	0.405		Plutonium-238	0.038	0.405
SU3-PRS159-142	5.23		Plutonium-238	0.03	5.230
SU3-PRS159-143	17.6		Plutonium-238	0.04	17.600
SU3-PRS159-144	0.74		Plutonium-238	0.03	0.740
SU3-PRS159-145	8.92		Plutonium-238	0.04	8.920
SU3-PRS159-146	0.059	J	Plutonium-238	0.031	0.059
SU3-PRS159-147	0.203		Plutonium-238	0.034	0.203
SU3-PRS159-148	0.4		Plutonium-238	0.036	0.400
SU3-PRS159-149	0.411		Plutonium-238	0.03	0.411
SU3-PRS159-150	0.01	U	Plutonium-238	0.029	0.010
SU3-PRS159-151	0.03	U	Plutonium-238	0.031	0.030
SU3-PRS159-152	0.016	U	Plutonium-238	0.033	0.016
SU3-PRS159-153	3.73		Plutonium-238	0.03	3.730
SU3-PRS159-154	7.04		Plutonium-238	0.03	7.040
SU3-PRS159-155	2.13		Plutonium-238	0.02	2.130
SU3-PRS159-156	0.01	U	Plutonium-238	0.024	0.010
SU3-PRS159-157	0.016	U	Plutonium-238	0.03	0.016
SU3-PRS159-158	0.084	J	Plutonium-238	0.033	0.084
SU3-PRS159-159	0.023	U	Plutonium-238	0.024	0.023
SU3-PRS159-160	7.3		Plutonium-238	0.03	7.300
SU3-PRS159-161	0.9		Plutonium-238	0.03	0.900
SU3-PRS159-162	1.66		Plutonium-238	0.04	1.660
SU3-PRS159-163	0.9		Plutonium-238	0.02	0.900
SU3-PRS159-164	0.039	J	Plutonium-238	0.034	0.039
SU3-PRS159-165	0.023	U	Plutonium-238	0.028	0.023
SU3-PRS159-166	1.06		Plutonium-238	0.03	1.060
SU3-PRS159-167	4.79		Plutonium-238	0.02	4.790
SU3-PRS159-168	0.218		Plutonium-238	0.038	0.218
SU3-PRS159-169	0.15		Plutonium-238	0.028	0.150
SU3-PRS159-170	0.5		Plutonium-238	0.03	0.500
SU3-PRS159-171	0.045	J	Plutonium-238	0.034	0.045
SU3-PRS159-172	1.07		Plutonium-238	0.03	1.070

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A-73/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU3-PRS159-173	0.108		Plutonium-238	0.035	0.108
SU3-PRS159-174	0.04	J	Plutonium-238	0.026	0.040
SU3-PRS159-175	0.124		Plutonium-238	0.025	0.124
SU3-PRS159-176	1.09		Plutonium-238	0.03	1.090
SU3-PRS159-177	0.316		Plutonium-238	0.035	0.316
SU3-PRS159-178	0.181		Plutonium-238	0.022	0.181
SU3-PRS159-179	0.065	J	Plutonium-238	0.03	0.065
SU3-PRS159-180	0.017	U	Plutonium-238	0.029	0.017
SU3-PRS159-181	0.089	J	Plutonium-238	0.021	0.089
SU3-PRS159-182	0.022	U	Plutonium-238	0.037	0.022
SU3-PRS159-183	4.12		Plutonium-238	0.02	4.120
SU3-PRS159-184	1.28		Plutonium-238	0.04	1.280
SU3-PRS159-185	4.23		Plutonium-238	0.02	4.230
SU3-PRS159-186	27		Plutonium-238	0.03	27.000
SU3-PRS159-187	1.03		Plutonium-238	0.02	1.030
SU3-PRS159-188	0.085	J	Plutonium-238	0.029	0.085
SU3-PRS159-189	0.47		Plutonium-238	0.02	0.470
SU3-PRS159-190	1.98		Plutonium-238	0.03	1.980
SU3-PRS159-191	0.038	J	Plutonium-238	0.023	0.038
SU3-PRS159-192	6.52		Plutonium-238	0.03	6.520
SU3 Pu-238				Standard Deviation	18.925
				Max Result	149.000
				Cleanup Objective	55.000
				Hot Spot Criteria	165.000

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A-79/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU3-PRS159-104	0.68		Thorium-230	0.08	0.680
SU3-PRS159-105	0.72		Thorium-230	0.11	0.720
SU3-PRS159-106	0.56		Thorium-230	0.04	0.560
SU3-PRS159-107	0.83		Thorium-230	0.03	0.830
SU3-PRS159-108	0.95		Thorium-230	0.04	0.950
SU3-PRS159-109	0.82		Thorium-230	0.05	0.820
SU3-PRS159-110	0.97		Thorium-230	0.04	0.970
SU3-PRS159-111	0.97		Thorium-230	0.05	0.970
SU3-PRS159-112	0.58		Thorium-230	0.11	0.580
SU3-PRS159-113	0.93		Thorium-230	0.05	0.930
SU3-PRS159-114	0.92		Thorium-230	0.09	0.920
SU3-PRS159-115	0.88		Thorium-230	0.04	0.880
SU3-PRS159-116	0.82		Thorium-230	0.05	0.820
SU3-PRS159-117	0.79		Thorium-230	0.04	0.790
SU3-PRS159-118	0.83		Thorium-230	0.04	0.830
SU3-PRS159-119	0.68		Thorium-230	0.02	0.680
SU3-PRS159-120	0.89		Thorium-230	0.03	0.890
SU3-PRS159-121	1.07		Thorium-230	0.02	1.070
SU3-PRS159-122	0.91		Thorium-230	0.03	0.910
SU3-PRS159-123	0.87		Thorium-230	0.04	0.870
SU3-PRS159-124	0.89		Thorium-230	0.07	0.890
SU3-PRS159-125	0.99		Thorium-230	0.06	0.990
SU3-PRS159-126	0.71		Thorium-230	0.07	0.710
SU3-PRS159-127	0.9		Thorium-230	0.03	0.900
SU3-PRS159-128	0.83		Thorium-230	0.03	0.830
SU3-PRS159-129	0.79		Thorium-230	0.09	0.790
SU3-PRS159-130	0.92		Thorium-230	0.05	0.920
SU3-PRS159-131	1.17		Thorium-230	0.07	1.170
SU3-PRS159-132	1.1		Thorium-230	0.13	1.100
SU3-PRS159-133	0.85		Thorium-230	0.06	0.850
SU3-PRS159-134	0.52		Thorium-230	0.03	0.520
SU3-PRS159-135	0.95		Thorium-230	0.13	0.950
SU3-PRS159-136	1.14		Thorium-230	0.06	1.140
SU3-PRS159-137	1.35		Thorium-230	0.08	1.350
SU3-PRS159-138	0.99		Thorium-230	0.1	0.990
SU3-PRS159-139	0.82		Thorium-230	0.07	0.820
SU3-PRS159-140	0.82		Thorium-230	0.04	0.820
SU3-PRS159-141	0.96		Thorium-230	0.03	0.960
SU3-PRS159-142	0.81		Thorium-230	0.05	0.810
SU3-PRS159-143	1.19		Thorium-230	0.05	1.190
SU3-PRS159-144	1		Thorium-230	0.05	1.000
SU3-PRS159-145	1.28		Thorium-230	0.06	1.280
SU3-PRS159-146	1.08		Thorium-230	0.06	1.080
SU3-PRS159-147	0.72		Thorium-230	0.05	0.720
SU3-PRS159-148	0.93		Thorium-230	0.05	0.930
SU3-PRS159-149	1.14		Thorium-230	0.06	1.140
SU3-PRS159-150	1.06		Thorium-230	0.07	1.060
SU3-PRS159-151	1.12		Thorium-230	0.05	1.120
SU3-PRS159-152	1.16		Thorium-230	0.07	1.160
SU3-PRS159-153	1.04		Thorium-230	0.05	1.040
SU3-PRS159-154	0.98		Thorium-230	0.05	0.980
SU3-PRS159-155	0.99		Thorium-230	0.06	0.990
SU3-PRS159-156	0.98		Thorium-230	0.07	0.980
SU3-PRS159-157	0.94		Thorium-230	0.05	0.940
SU3-PRS159-158	0.75		Thorium-230	0.05	0.750
SU3-PRS159-159	1.12		Thorium-230	0.05	1.120
SU3-PRS159-160	1.11		Thorium-230	0.06	1.110
SU3-PRS159-161	0.78		Thorium-230	0.05	0.780
SU3-PRS159-162	1.09		Thorium-230	0.05	1.090
SU3-PRS159-163	0.98		Thorium-230	0.05	0.980
SU3-PRS159-164	1.14		Thorium-230	0.03	1.140
SU3-PRS159-165	1.03		Thorium-230	0.07	1.030
SU3-PRS159-166	0.81		Thorium-230	0.06	0.810
SU3-PRS159-167	0.82		Thorium-230	0.04	0.820
SU3-PRS159-168	0.89		Thorium-230	0.04	0.890
SU3-PRS159-169	1.17		Thorium-230	0.03	1.170
SU3-PRS159-170	0.82		Thorium-230	0.04	0.820
SU3-PRS159-171	0.98		Thorium-230	0.03	0.980
SU3-PRS159-172	0.83		Thorium-230	0.03	0.830

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2
A-80/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU3-PRS159-173	1.04		Thorium-230	0.04	1.040
SU3-PRS159-174	0.99		Thorium-230	0.04	0.990
SU3-PRS159-175	0.96		Thorium-230	0.06	0.960
SU3-PRS159-176	0.89		Thorium-230	0.03	0.890
SU3-PRS159-177	1.15		Thorium-230	0.06	1.150
SU3-PRS159-178	0.79		Thorium-230	0.03	0.790
SU3-PRS159-179	0.83		Thorium-230	0.04	0.830
SU3-PRS159-180	0.94		Thorium-230	0.05	0.940
SU3-PRS159-181	0.98		Thorium-230	0.04	0.980
SU3-PRS159-182	0.98		Thorium-230	0.03	0.980
SU3-PRS159-183	0.91		Thorium-230	0.08	0.910
SU3-PRS159-184	1		Thorium-230	0.03	1.000
SU3-PRS159-185	0.72		Thorium-230	0.02	0.720
SU3-PRS159-186	0.96		Thorium-230	0.03	0.960
SU3-PRS159-187	1.24		Thorium-230	0.02	1.240
SU3-PRS159-188	0.73		Thorium-230	0.04	0.730
SU3-PRS159-189	1.08		Thorium-230	0.04	1.080
SU3-PRS159-190	1.06		Thorium-230	0.02	1.060
SU3-PRS159-191	0.78		Thorium-230	0.02	0.780
SU3-PRS159-192	1.4		Thorium-230	0.03	1.400
SU3 Th-230				**Standard Deviation**	**0.167**
				Max Result	**1.400**
				Cleanup Objective	**2.800**
				Hot Spot Criteria	**4.600**

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A81/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU3-PRS159-104	0.87		Thorium-232	0.1	0.870
SU3-PRS159-105	1.21		Thorium-232	0.11	1.210
SU3-PRS159-106	0.65		Thorium-232	0.03	0.650
SU3-PRS159-107	0.99		Thorium-232	0.05	0.990
SU3-PRS159-108	1.15		Thorium-232	0.04	1.150
SU3-PRS159-109	0.98		Thorium-232	0.04	0.980
SU3-PRS159-110	1.28		Thorium-232	0.02	1.280
SU3-PRS159-111	1.18		Thorium-232	0.04	1.180
SU3-PRS159-112	0.94		Thorium-232	0.07	0.940
SU3-PRS159-113	1.17		Thorium-232	0.05	1.170
SU3-PRS159-114	1.31		Thorium-232	0.08	1.310
SU3-PRS159-115	0.99		Thorium-232	0.02	0.990
SU3-PRS159-116	0.79		Thorium-232	0.04	0.790
SU3-PRS159-117	1.31		Thorium-232	0.04	1.310
SU3-PRS159-118	1.36		Thorium-232	0.04	1.360
SU3-PRS159-119	1.36		Thorium-232	0.02	1.360
SU3-PRS159-120	1.05		Thorium-232	0.02	1.050
SU3-PRS159-121	0.94		Thorium-232	0.04	0.940
SU3-PRS159-122	1.07		Thorium-232	0.02	1.070
SU3-PRS159-123	1.17		Thorium-232	0.06	1.170
SU3-PRS159-124	1.16		Thorium-232	0.04	1.160
SU3-PRS159-125	0.96		Thorium-232	0.03	0.960
SU3-PRS159-126	1.09		Thorium-232	0.08	1.090
SU3-PRS159-127	1.14		Thorium-232	0.02	1.140
SU3-PRS159-128	1.05		Thorium-232	0.03	1.050
SU3-PRS159-129	1.11		Thorium-232	0.06	1.110
SU3-PRS159-130	1.13		Thorium-232	0.05	1.130
SU3-PRS159-131	1.59		Thorium-232	0.1	1.590
SU3-PRS159-132	1.3		Thorium-232	0.07	1.300
SU3-PRS159-133	1.45		Thorium-232	0.06	1.450
SU3-PRS159-134	0.64		Thorium-232	0.02	0.640
SU3-PRS159-135	1.27		Thorium-232	0.13	1.270
SU3-PRS159-136	1.32		Thorium-232	0.05	1.320
SU3-PRS159-137	1.11		Thorium-232	0.06	1.110
SU3-PRS159-138	1.06		Thorium-232	0.05	1.060
SU3-PRS159-139	1.17		Thorium-232	0.06	1.170
SU3-PRS159-140	1.14		Thorium-232	0.06	1.140
SU3-PRS159-141	1.51		Thorium-232	0.06	1.510
SU3-PRS159-142	1.15		Thorium-232	0.03	1.150
SU3-PRS159-143	1.39		Thorium-232	0.05	1.390
SU3-PRS159-144	1.13		Thorium-232	0.05	1.130
SU3-PRS159-145	0.95		Thorium-232	0.05	0.950
SU3-PRS159-146	1.41		Thorium-232	0.04	1.410
SU3-PRS159-147	1.24		Thorium-232	0.04	1.240
SU3-PRS159-148	1.18		Thorium-232	0.05	1.180
SU3-PRS159-149	1.27		Thorium-232	0.04	1.270
SU3-PRS159-150	1.13		Thorium-232	0.05	1.130
SU3-PRS159-151	1.38		Thorium-232	0.06	1.380
SU3-PRS159-152	1.13		Thorium-232	0.05	1.130
SU3-PRS159-153	1.23		Thorium-232	0.05	1.230
SU3-PRS159-154	1.51		Thorium-232	0.05	1.510
SU3-PRS159-155	1.33		Thorium-232	0.09	1.330
SU3-PRS159-156	0.91		Thorium-232	0.09	0.910
SU3-PRS159-157	0.96		Thorium-232	0.04	0.960
SU3-PRS159-158	0.87		Thorium-232	0.06	0.870
SU3-PRS159-159	1.3		Thorium-232	0.07	1.300
SU3-PRS159-160	1.02		Thorium-232	0.06	1.020
SU3-PRS159-161	1.2		Thorium-232	0.05	1.200
SU3-PRS159-162	1.18		Thorium-232	0.05	1.180
SU3-PRS159-163	1.09		Thorium-232	0.04	1.090
SU3-PRS159-164	1.43		Thorium-232	0.05	1.430
SU3-PRS159-165	1.47		Thorium-232	0.03	1.470
SU3-PRS159-166	1.27		Thorium-232	0.06	1.270
SU3-PRS159-167	0.94		Thorium-232	0.06	0.940
SU3-PRS159-168	0.96		Thorium-232	0.03	0.960
SU3-PRS159-169	1.25		Thorium-232	0.04	1.250
SU3-PRS159-170	1.1		Thorium-232	0.02	1.100
SU3-PRS159-171	1.22		Thorium-232	0.03	1.220
SU3-PRS159-172	1.1		Thorium-232	0.03	1.100

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A82/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU3-PRS159-173	1.15		Thorium-232	0.06	1.150
SU3-PRS159-174	1.08		Thorium-232	0.05	1.080
SU3-PRS159-175	1.19		Thorium-232	0.07	1.190
SU3-PRS159-176	1.23		Thorium-232	0.04	1.230
SU3-PRS159-177	1.3		Thorium-232	0.06	1.300
SU3-PRS159-178	1.15		Thorium-232	0.04	1.150
SU3-PRS159-179	1.09		Thorium-232	0.02	1.090
SU3-PRS159-180	1.25		Thorium-232	0.03	1.250
SU3-PRS159-181	1.21		Thorium-232	0.04	1.210
SU3-PRS159-182	1.19		Thorium-232	0.02	1.190
SU3-PRS159-183	1.06		Thorium-232	0.08	1.060
SU3-PRS159-184	1.32		Thorium-232	0.04	1.320
SU3-PRS159-185	0.69		Thorium-232	0.04	0.690
SU3-PRS159-186	0.84		Thorium-232	0.03	0.840
SU3-PRS159-187	1.4		Thorium-232	0.03	1.400
SU3-PRS159-188	0.96		Thorium-232	0.02	0.960
SU3-PRS159-189	1.14		Thorium-232	0.04	1.140
SU3-PRS159-190	1.2		Thorium-232	0.03	1.200
SU3-PRS159-191	1.1		Thorium-232	0.04	1.100
SU3-PRS159-192	0.71		Thorium-232	0.02	0.710
SU3 Th-232				Standard Deviation	0.191
				Max Result	1.590
				Cleanup Objective	2.100
				Hot Spot Criteria	3.500

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A83/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU4-PRS159-193	-0.006	U	Plutonium-238	0.041	0.021
SU4-PRS159-194	0.261		Plutonium-238	0.041	0.261
SU4-PRS159-195	0.029	U	Plutonium-238	0.044	0.029
SU4-PRS159-196	1.06		Plutonium-238	0.04	1.060
SU4-PRS159-197	4.17		Plutonium-238	0.05	4.170
SU4-PRS159-198	1.57		Plutonium-238	0.03	1.570
SU4-PRS159-199	17.5		Plutonium-238	0.04	17.500
SU4-PRS159-200	2.87		Plutonium-238	0.04	2.870
SU4-PRS159-201	0.203		Plutonium-238	0.078	0.203
SU4-PRS159-202	0.72		Plutonium-238	0.04	0.720
SU4-PRS159-203	0.061	J	Plutonium-238	0.039	0.061
SU4-PRS159-204	0.104		Plutonium-238	0.026	0.104
SU4-PRS159-205	51.5		Plutonium-238	0.03	51.500
SU4-PRS159-206	0.108	J	Plutonium-238	0.081	0.108
SU4-PRS159-207	0.058	J	Plutonium-238	0.03	0.058
SU4-PRS159-208	0.78		Plutonium-238	0.03	0.780
SU4-PRS159-209	1.54		Plutonium-238	0.03	1.540
SU4-PRS159-210	0.028	U	Plutonium-238	0.03	0.028
SU4-PRS159-211	4.75		Plutonium-238	0.03	4.750
SU4-PRS159-212	2.56		Plutonium-238	0.02	2.560
SU4-PRS159-213	**98**		**Plutonium-238**	**0.06**	**98.000**
SU4-PRS159-214	0.037	J	Plutonium-238	0.023	0.037
SU4-PRS159-215	2.23		Plutonium-238	0.03	2.230
SU4-PRS159-216	0.147		Plutonium-238	0.027	0.147
SU4-PRS159-217	20.7		Plutonium-238	0.02	20.700
SU4-PRS159-218	22.3		Plutonium-238	0.05	22.300
SU4-PRS159-219	28.6		Plutonium-238	0.08	28.600
SU4-PRS159-220	25.7		Plutonium-238	0.07	25.700
SU4-PRS159-221	4.76		Plutonium-238	0.05	4.760
SU4-PRS159-222	3.43		Plutonium-238	0.03	3.430
SU4-PRS159-223	0.062	J	Plutonium-238	0.035	0.062
SU4-PRS159-224	2.4		Plutonium-238	0.06	2.400
SU4-PRS159-225	0.26		Plutonium-238	0.06	0.260
SU4-PRS159-226	5.3		Plutonium-238	0.05	5.300
SU4-PRS159-227	3.2		Plutonium-238	0.05	3.200
SU4-PRS159-228	2.57		Plutonium-238	0.06	2.570
SU4-PRS159-230	2.22		Plutonium-238	0.08	2.220
SU4-PRS159-231	0.233		Plutonium-238	0.046	0.233
SU4-PRS159-232	0.11	J	Plutonium-238	0.079	0.110
SU4-PRS159-233	1.88		Plutonium-238	0.06	1.880
SU4-PRS159-234	5.48		Plutonium-238	0.08	5.480
SU4-PRS159-235	3.35		Plutonium-238	0.09	3.350
SU4-PRS159-236	0.27		Plutonium-238	0.08	0.270
SU4-PRS159-237	0.43		Plutonium-238	0.09	0.430
SU4-PRS159-238	1.47		Plutonium-238	0.07	1.470
SU4-PRS159-239	13.6		Plutonium-238	0.1	13.600
SU4-PRS159-240	0.093	J	Plutonium-238	0.057	0.093
SU4-PRS159-241	11.6		Plutonium-238	0.09	11.600
SU4-PRS159-242	28.1		Plutonium-238	0.02	28.100
SU4-PRS159-243	0.009	U	Plutonium-238	0.019	0.009
SU4-PRS159-244	0.92		Plutonium-238	0.02	0.920
SU4-PRS159-245	0.216		Plutonium-238	0.025	0.216
SU4-PRS159-246	0.305		Plutonium-238	0.029	0.305
SU4-PRS159-247	0.244		Plutonium-238	0.019	0.244
SU4-PRS159-248	0.072	J	Plutonium-238	0.026	0.072
SU4-PRS159-249	1.32		Plutonium-238	0.02	1.320
SU4-PRS159-250	0.018	U	Plutonium-238	0.026	0.018
SU4-PRS159-251	7.66		Plutonium-238	0.04	7.660
SU4-PRS159-252	0.45		Plutonium-238	0.037	0.450
SU4-PRS159-253	0.159		Plutonium-238	0.041	0.159
SU4-PRS159-254	1.52		Plutonium-238	0.03	1.520
SU4-PRS159-255	2.58		Plutonium-238	0.04	2.580
SU4-PRS159-256	1.44		Plutonium-238	0.03	1.440
SU4-PRS159-257	3.91		Plutonium-238	0.05	3.910
SU4-PRS159-258	1.85		Plutonium-238	0.04	1.850
SU4-PRS159-259	2.09		Plutonium-238	0.01	2.090
SU4-PRS159-260	0.337		Plutonium-238	0.027	0.337
SU4-PRS159-261	0.61		Plutonium-238	0.04	0.610
SU4-PRS159-262	1.36		Plutonium-238	0.04	1.360

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A-84/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU4-PRS159-263	2.41		Plutonium-238	0.04	2.410
SU4-PRS159-264	0.239		Plutonium-238	0.04	0.239
SU4-PRS159-265	7.64		Plutonium-238	0.04	7.640
SU4-PRS159-266	2.85		Plutonium-238	0.04	2.850
SU4-PRS159-267	1.31		Plutonium-238	0.04	1.310
SU4-PRS159-268	12.7		Plutonium-238	0.04	12.700
SU4-PRS159-269	1.61		Plutonium-238	0.08	1.610
SU4-PRS159-270	3.73		Plutonium-238	0.03	3.730
SU4-PRS159-271	2.53		Plutonium-238	0.03	2.530
SU4-PRS159-272	5.87		Plutonium-238	0.03	5.870
SU4-PRS159-325	0.087	J	Plutonium-238	0.068	0.087
SU4-PRS159-326	0.16	J	Plutonium-238	0.11	0.160
SU4 Pu-238				Standard Deviation	13.327
				Max Result	98.000
				Cleanup Objective	55.000
				Hot Spot Criteria	165.000

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A85/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU4-PRS159-193	0.94		Thorium-230	0.03	0.940
SU4-PRS159-194	0.96		Thorium-230	0.04	0.960
SU4-PRS159-195	1.16		Thorium-230	0.02	1.160
SU4-PRS159-196	0.84		Thorium-230	0.03	0.840
SU4-PRS159-197	0.86		Thorium-230	0.07	0.860
SU4-PRS159-198	0.98		Thorium-230	0.02	0.980
SU4-PRS159-199	1		Thorium-230	0.05	1.000
SU4-PRS159-200	1.06		Thorium-230	0.03	1.060
SU4-PRS159-201	1.09		Thorium-230	0.08	1.090
SU4-PRS159-202	1		Thorium-230	0.03	1.000
SU4-PRS159-203	0.83		Thorium-230	0.03	0.830
SU4-PRS159-204	0.8		Thorium-230	0.03	0.800
SU4-PRS159-205	0.89		Thorium-230	0.03	0.890
SU4-PRS159-206	0.85		Thorium-230	0.11	0.850
SU4-PRS159-207	0.96		Thorium-230	0.04	0.960
SU4-PRS159-208	0.87		Thorium-230	0.03	0.870
SU4-PRS159-209	0.52		Thorium-230	0.02	0.520
SU4-PRS159-210	0.89		Thorium-230	0.04	0.890
SU4-PRS159-211	0.91		Thorium-230	0.05	0.910
SU4-PRS159-212	0.81		Thorium-230	0.04	0.810
SU4-PRS159-213	0.93		Thorium-230	0.48	0.930
SU4-PRS159-214	0.91		Thorium-230	0.02	0.910
SU4-PRS159-215	0.92		Thorium-230	0.02	0.920
SU4-PRS159-216	0.88		Thorium-230	0.18	0.880
SU4-PRS159-217	0.69		Thorium-230	0.05	0.690
SU4-PRS159-218	1.06		Thorium-230	0.11	1.060
SU4-PRS159-219	1.16		Thorium-230	0.07	1.160
SU4-PRS159-220	1.05		Thorium-230	0.17	1.050
SU4-PRS159-221	1.09		Thorium-230	0.12	1.090
SU4-PRS159-222	0.9		Thorium-230	0.09	0.900
SU4-PRS159-223	0.82		Thorium-230	0.06	0.820
SU4-PRS159-224	1.11		Thorium-230	0.1	1.110
SU4-PRS159-225	1.16		Thorium-230	0.04	1.160
SU4-PRS159-226	1.05		Thorium-230	0.05	1.050
SU4-PRS159-227	1.27		Thorium-230	0.1	1.270
SU4-PRS159-228	1.16		Thorium-230	0.04	1.160
SU4-PRS159-230	1.31		Thorium-230	0.12	1.310
SU4-PRS159-231	0.93		Thorium-230	0.13	0.930
SU4-PRS159-232	1.44		Thorium-230	0.1	1.440
SU4-PRS159-233	0.96		Thorium-230	0.11	0.960
SU4-PRS159-234	1.05		Thorium-230	0.19	1.050
SU4-PRS159-235	1.01		Thorium-230	0.08	1.010
SU4-PRS159-236	0.67		Thorium-230	0.11	0.670
SU4-PRS159-237	1.16		Thorium-230	0.14	1.160
SU4-PRS159-238	1.06		Thorium-230	0.13	1.060
SU4-PRS159-239	0.83		Thorium-230	0.12	0.830
SU4-PRS159-240	0.94		Thorium-230	0.1	0.940
SU4-PRS159-241	1.03		Thorium-230	0.13	1.030
SU4-PRS159-242	0.66		Thorium-230	0.1	0.660
SU4-PRS159-243	0.78		Thorium-230	0.09	0.780
SU4-PRS159-244	0.95		Thorium-230	0.05	0.950
SU4-PRS159-245	0.81		Thorium-230	0.07	0.810
SU4-PRS159-246	1.01		Thorium-230	0.09	1.010
SU4-PRS159-247	0.68		Thorium-230	0.11	0.680
SU4-PRS159-248	0.96		Thorium-230	0.06	0.960
SU4-PRS159-249	0.78		Thorium-230	0.07	0.780
SU4-PRS159-250	0.96		Thorium-230	0.09	0.960
SU4-PRS159-251	1.02		Thorium-230	0.06	1.020
SU4-PRS159-252	0.8		Thorium-230	0.05	0.800
SU4-PRS159-253	0.88		Thorium-230	0.08	0.880
SU4-PRS159-254	0.69		Thorium-230	0.1	0.690
SU4-PRS159-255	0.7		Thorium-230	0.07	0.700
SU4-PRS159-256	0.97		Thorium-230	0.04	0.970
SU4-PRS159-257	0.95		Thorium-230	0.07	0.950
SU4-PRS159-258	1.01		Thorium-230	0.02	1.010
SU4-PRS159-259	0.93		Thorium-230	0.05	0.930
SU4-PRS159-260	0.96		Thorium-230	0.03	0.960
SU4-PRS159-261	0.91		Thorium-230	0.04	0.910
SU4-PRS159-262	1.15		Thorium-230	0.06	1.150

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A86/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU4-PRS159-263	0.8		Thorium-230	0.06	0.800
SU4-PRS159-264	0.82		Thorium-230	0.04	0.820
SU4-PRS159-265	0.94		Thorium-230	0.05	0.940
SU4-PRS159-266	0.92		Thorium-230	0.08	0.920
SU4-PRS159-267	0.89		Thorium-230	0.11	0.890
SU4-PRS159-268	0.62		Thorium-230	0.1	0.620
SU4-PRS159-269	0.78		Thorium-230	0.03	0.780
SU4-PRS159-270	0.83		Thorium-230	0.05	0.830
SU4-PRS159-271	0.68		Thorium-230	0.03	0.680
SU4-PRS159-272	0.69		Thorium-230	0.03	0.690
SU4-PRS159-325	0.87		Thorium-230	0.04	0.870
SU4-PRS159-326	0.82		Thorium-230	0.05	0.820
SU4 Th-230				Standard Deviation	0.161
				Max Result	1.440
				Cleanup Objective	2.800
				Hot Spot Criteria	4.600

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A87/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU4-PRS159-193	1.19		Thorium-232	0.01	1.190
SU4-PRS159-194	1.3		Thorium-232	0.03	1.300
SU4-PRS159-195	1.44		Thorium-232	0.04	1.440
SU4-PRS159-196	0.196		Thorium-232	0.011	0.196
SU4-PRS159-197	0.33		Thorium-232	0.03	0.330
SU4-PRS159-198	0.6		Thorium-232	0.03	0.600
SU4-PRS159-199	1.07		Thorium-232	0.03	1.070
SU4-PRS159-200	1.06		Thorium-232	0.03	1.060
SU4-PRS159-201	1.14		Thorium-232	0.07	1.140
SU4-PRS159-202	1.06		Thorium-232	0.02	1.060
SU4-PRS159-203	1.18		Thorium-232	0.02	1.180
SU4-PRS159-204	1.17		Thorium-232	0.02	1.170
SU4-PRS159-205	1.18		Thorium-232	0.02	1.180
SU4-PRS159-206	0.89		Thorium-232	0.11	0.890
SU4-PRS159-207	1.1		Thorium-232	0.03	1.100
SU4-PRS159-208	1.11		Thorium-232	0.03	1.110
SU4-PRS159-209	0.215		Thorium-232	0.013	0.215
SU4-PRS159-210	1.21		Thorium-232	0.04	1.210
SU4-PRS159-211	1.05		Thorium-232	0.02	1.050
SU4-PRS159-212	0.99		Thorium-232	0.03	0.990
SU4-PRS159-213	0.86		Thorium-232	0.45	0.860
SU4-PRS159-214	1.2		Thorium-232	0.02	1.200
SU4-PRS159-215	1.02		Thorium-232	0.03	1.020
SU4-PRS159-216	1.34		Thorium-232	0.16	1.340
SU4-PRS159-217	1.04		Thorium-232	0.09	1.040
SU4-PRS159-218	0.82		Thorium-232	0.11	0.820
SU4-PRS159-219	0.89		Thorium-232	0.04	0.890
SU4-PRS159-220	1.81		Thorium-232	0.07	1.810
SU4-PRS159-221	1.11		Thorium-232	0.11	1.110
SU4-PRS159-222	1.14		Thorium-232	0.06	1.140
SU4-PRS159-223	0.65		Thorium-232	0.06	0.650
SU4-PRS159-224	1.27		Thorium-232	0.09	1.270
SU4-PRS159-225	1.19		Thorium-232	0.04	1.190
SU4-PRS159-226	1.26		Thorium-232	0.08	1.260
SU4-PRS159-227	1.08		Thorium-232	0.06	1.080
SU4-PRS159-228	1.32		Thorium-232	0.07	1.320
SU4-PRS159-230	1.05		Thorium-232	0.06	1.050
SU4-PRS159-231	1.18		Thorium-232	0.07	1.180
SU4-PRS159-232	1.29		Thorium-232	0.12	1.290
SU4-PRS159-233	0.88		Thorium-232	0.09	0.880
SU4-PRS159-234	1.04		Thorium-232	0.13	1.040
SU4-PRS159-235	1.17		Thorium-232	0.08	1.170
SU4-PRS159-236	0.96		Thorium-232	0.1	0.960
SU4-PRS159-237	0.99		Thorium-232	0.2	0.990
SU4-PRS159-238	1.4		Thorium-232	0.16	1.400
SU4-PRS159-239	1.16		Thorium-232	0.16	1.160
SU4-PRS159-240	1.42		Thorium-232	0.13	1.420
SU4-PRS159-241	1.02		Thorium-232	0.13	1.020
SU4-PRS159-242	0.91		Thorium-232	0.11	0.910
SU4-PRS159-243	0.97		Thorium-232	0.12	0.970
SU4-PRS159-244	1.17		Thorium-232	0.03	1.170
SU4-PRS159-245	1.22		Thorium-232	0.07	1.220
SU4-PRS159-246	0.96		Thorium-232	0.08	0.960
SU4-PRS159-247	1.11		Thorium-232	0.09	1.110
SU4-PRS159-248	1.31		Thorium-232	0.04	1.310
SU4-PRS159-249	0.85		Thorium-232	0.06	0.850
SU4-PRS159-250	1.11		Thorium-232	0.09	1.110
SU4-PRS159-251	1.42		Thorium-232	0.04	1.420
SU4-PRS159-252	0.77		Thorium-232	0.05	0.770
SU4-PRS159-253	1.41		Thorium-232	0.08	1.410
SU4-PRS159-254	0.94		Thorium-232	0.04	0.940
SU4-PRS159-255	0.95		Thorium-232	0.06	0.950
SU4-PRS159-256	1.28		Thorium-232	0.07	1.280
SU4-PRS159-257	1.04		Thorium-232	0.07	1.040
SU4-PRS159-258	1.41		Thorium-232	0.03	1.410
SU4-PRS159-259	1.1		Thorium-232	0.03	1.100
SU4-PRS159-260	1.24		Thorium-232	0.03	1.240
SU4-PRS159-261	1.07		Thorium-232	0.02	1.070
SU4-PRS159-262	1.38		Thorium-232	0.05	1.380

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A88/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU4-PRS159-263	0.8		Thorium-232	0.04	0.800
SU4-PRS159-264	0.88		Thorium-232	0.07	0.880
SU4-PRS159-265	0.9		Thorium-232	0.08	0.900
SU4-PRS159-266	0.71		Thorium-232	0.04	0.710
SU4-PRS159-267	0.9		Thorium-232	0.13	0.900
SU4-PRS159-268	0.78		Thorium-232	0.06	0.780
SU4-PRS159-269	0.95		Thorium-232	0.04	0.950
SU4-PRS159-270	0.85		Thorium-232	0.04	0.850
SU4-PRS159-271	0.39		Thorium-232	0.03	0.390
SU4-PRS159-272	0.89		Thorium-232	0.02	0.890
SU4-PRS159-325	0.37		Thorium-232	0.03	0.370
SU4-PRS159-326	0.84		Thorium-232	0.03	0.840
SU4 Th-232				Standard Deviation	0.280
				Max Result	1.810
				Cleanup Objective	2.100
				Hot Spot Criteria	3.500

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A89/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU5-PRS159-273	0.003	U	Actinium 227	0.18	0.003
SU5-PRS159-274	0.11	U	Actinium 227	0.35	0.110
SU5-PRS159-275	0.53	J	Actinium 227	0.33	0.530
SU5-PRS159-276	0.008	U	Actinium 227	0.21	0.008
SU5-PRS159-277	0.17	U	Actinium 227	0.39	0.170
SU5-PRS159-278	0.09	U	Actinium 227	0.3	0.090
SU5-PRS159-279	0.48	J	Actinium 227	0.3	0.480
SU5-PRS159-280	-0.02	U	Actinium 227	0.24	0.120
SU5-PRS159-281	0.98	J	Actinium 227	0.32	0.980
SU5-PRS159-282	0.004	U	Actinium 227	0.25	0.004
SU5-PRS159-283	0.63	J	Actinium 227	0.51	0.630
SU5-PRS159-283	-0.26	U	Actinium 227	0.36	0.180
SU5-PRS159-284	-0.15	U	Actinium 227	0.44	0.220
SU5-PRS159-285	-0.04	U	Actinium 227	0.38	0.190
SU5-PRS159-286	1.14	J	Actinium 227	0.62	1.140
SU5-PRS159-287	-0.05	U	Actinium 227	0.35	0.175
SU5-PRS159-288	0.02	U	Actinium 227	0.4	0.020
SU5-PRS159-289	0.26	U	Actinium 227	0.42	0.260
SU5-PRS159-290	1.63	J	Actinium 227	0.62	1.630
SU5-PRS159-291	0.1	U	Actinium 227	0.34	0.100
SU5-PRS159-292	0.19	U	Actinium 227	0.4	0.190
SU5-PRS159-293	0.03	U	Actinium 227	0.4	0.030
SU5-PRS159-294	1.4	J	Actinium 227	0.6	1.400
SU5-PRS159-295	0.23	U	Actinium 227	0.4	0.230
SU5-PRS159-296	0.98	J	Actinium 227	0.47	0.980
SU5-PRS159-297	0.11	U	Actinium 227	0.32	0.110
SU5-PRS159-298	-0.01	U	Actinium 227	0.4	0.200
SU5-PRS159-299	1.3	J	Actinium 227	0.57	1.300
SU5-PRS159-300	0.01	U	Actinium 227	0.39	0.010
SU5-PRS159-301	0.03	U	Actinium 227	0.44	0.030
SU5-PRS159-302	0.81	J	Actinium 227	0.53	0.810
SU5-PRS159-303	-0.09	U	Actinium 227	0.33	0.165
SU5-PRS159-304	-0.003	U	Actinium 227	0.41	0.205
SU5-PRS159-305	0.95	J	Actinium 227	0.56	0.950
SU5-PRS159-306	0.84	J	Actinium 227	0.54	0.840
SU5-PRS159-307	0.3	U	Actinium 227	0.42	0.300
SU5-PRS159-308	1.03	J	Actinium 227	0.59	1.030
SU5-PRS159-309	0.03	U	Actinium 227	0.21	0.030
SU5-PRS159-310	-0.09	U	Actinium 227	0.23	0.115
SU5-PRS159-311	0.58	J	Actinium 227	0.44	0.580
SU5-PRS159-312	0.02	U	Actinium 227	0.37	0.020
SU5-PRS159-313	0.04	U	Actinium 227	0.5	0.040
SU5-PRS159-314	1.47	J	Actinium 227	0.58	1.470
SU5-PRS159-315	-0.16	U	Actinium 227	0.4	0.200
SU5-PRS159-316	0.08	U	Actinium 227	0.4	0.080
SU5-PRS159-317	0.03	U	Actinium 227	0.41	0.030
SU5 Ac-227				**Standard Deviation**	**0.461**
				Max Result	**1.630**
				Cleanup Objective	**4.600**
				Hot Spot Criteria	**13.610**

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A90/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU5-PRS159-273	0.02	U	Lead 210	0.86	0.020
SU5-PRS159-274	0.9	U	Lead 210	1.5	0.900
SU5-PRS159-275	-0.009	U	Lead 210	1.3	0.650
SU5-PRS159-276	0.71	U	Lead 210	1.2	0.710
SU5-PRS159-277	0.4	U	Lead 210	1.9	0.400
SU5-PRS159-278	0.11	U	Lead 210	1.5	0.110
SU5-PRS159-279	0.04	U	Lead 210	1.3	0.040
SU5-PRS159-280	0.12	U	Lead 210	1.3	0.120
SU5-PRS159-281	0.26	U	Lead 210	1.1	0.260
SU5-PRS159-282	1.37	U	Lead 210	1.5	1.370
SU5-PRS159-283	2.6	J	Lead 210	2.5	2.600
SU5-PRS159-283	0.8	U	Lead 210	2.1	0.800
SU5-PRS159-284	0.8	U	Lead 210	2.5	0.800
SU5-PRS159-285	0.18	U	Lead 210	1.8	0.180
SU5-PRS159-286	0.6	U	Lead 210	2.2	0.600
SU5-PRS159-287	1.7	U	Lead 210	2.1	1.700
SU5-PRS159-288	0.16	U	Lead 210	1.8	0.160
SU5-PRS159-289	0.3	U	Lead 210	1.9	0.300
SU5-PRS159-290	1	U	Lead 210	2.1	1.000
SU5-PRS159-291	1	U	Lead 210	1.5	1.000
SU5-PRS159-292	0.7	U	Lead 210	2.2	0.700
SU5-PRS159-293	-0.08	U	Lead 210	1.8	0.900
SU5-PRS159-294	0.1	U	Lead 210	2	0.100
SU5-PRS159-295	0.6	U	Lead 210	1.9	0.600
SU5-PRS159-296	0.77	U	Lead 210	1.8	0.770
SU5-PRS159-297	-0.11	U	Lead 210	1.6	0.800
SU5-PRS159-298	1.4	U	Lead 210	2.4	1.400
SU5-PRS159-299	-0.4	U	Lead 210	2	1.000
SU5-PRS159-300	-0.04	U	Lead 210	2	1.000
SU5-PRS159-301	1.7	J	Lead 210	1.7	1.700
SU5-PRS159-302	0.6	U	Lead 210	2	0.600
SU5-PRS159-303	1.26	U	Lead 210	1.7	1.260
SU5-PRS159-304	1.2	U	Lead 210	2.4	1.200
SU5-PRS159-305	-0.5	U	Lead 210	2	1.000
SU5-PRS159-306	-0.9	U	Lead 210	1.8	0.900
SU5-PRS159-307	0.9	U	Lead 210	2.1	0.900
SU5-PRS159-308	0.03	U	Lead 210	2	0.030
SU5-PRS159-309	0.29	U	Lead 210	1.2	0.290
SU5-PRS159-310	0.22	U	Lead 210	1.1	0.220
SU5-PRS159-311	1.03	U	Lead 210	1.9	1.030
SU5-PRS159-312	1.4	U	Lead 210	2.1	1.400
SU5-PRS159-313	1.2	U	Lead 210	2.8	1.200
SU5-PRS159-314	1.9	U	Lead 210	2.1	1.900
SU5-PRS159-315	0.8	U	Lead 210	2.2	0.800
SU5-PRS159-316	-0.1	U	Lead 210	2.1	1.050
SU5-PRS159-317	0.4	U	Lead 210	2.3	0.400
SU5 Pb-210				Standard Deviation	0.550
				Max Result	2.600
				Cleanup Objective	7.400
				Hot Spot Criteria	19.800

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2
A04/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU5-PRS159-273	2.14		Plutonium-238	0.04	2.140
SU5-PRS159-274	1.17		Plutonium-238	0.04	1.170
SU5-PRS159-275	8.51		Plutonium-238	0.03	8.510
SU5-PRS159-276	2.38		Plutonium-238	0.04	2.380
SU5-PRS159-277	4.19		Plutonium-238	0.04	4.190
SU5-PRS159-278	2.65		Plutonium-238	0.04	2.650
SU5-PRS159-279	6.21		Plutonium-238	0.03	6.210
SU5-PRS159-280	16		Plutonium-238	0.03	16.000
SU5-PRS159-281	2.67		Plutonium-238	0.03	2.670
SU5-PRS159-282	5.46		Plutonium-238	0.03	5.460
SU5-PRS159-283	6.95		Plutonium-238	0.03	6.950
SU5-PRS159-283	5.38		Plutonium-238	0.08	5.380
SU5-PRS159-284	3.51		Plutonium-238	0.03	3.510
SU5-PRS159-285	34.9		Plutonium-238	0.05	34.900
SU5-PRS159-286	22.3		Plutonium-238	0.04	22.300
SU5-PRS159-287	2.32		Plutonium-238	0.03	2.320
SU5-PRS159-288	1.51		Plutonium-238	0.04	1.510
SU5-PRS159-289	5.17		Plutonium-238	0.03	5.170
SU5-PRS159-290	10		Plutonium-238	0.05	10.000
SU5-PRS159-291	3.54		Plutonium-238	0.03	3.540
SU5-PRS159-292	4.11		Plutonium-238	0.09	4.110
SU5-PRS159-293	2.27		Plutonium-238	0.04	2.270
SU5-PRS159-294	0.89		Plutonium-238	0.04	0.890
SU5-PRS159-295	0.54		Plutonium-238	0.02	0.540
SU5-PRS159-296	0.49		Plutonium-238	0.08	0.490
SU5-PRS159-297	0.88		Plutonium-238	0.09	0.880
SU5-PRS159-298	0.93		Plutonium-238	0.05	0.930
SU5-PRS159-299	0.33		Plutonium-238	0.039	0.330
SU5-PRS159-300	0.252		Plutonium-238	0.031	0.252
SU5-PRS159-301	1.48		Plutonium-238	0.07	1.480
SU5-PRS159-302	3.12		Plutonium-238	0.03	3.120
SU5-PRS159-303	1.05		Plutonium-238	0.04	1.050
SU5-PRS159-304	0.084	J	Plutonium-238	0.035	0.084
SU5-PRS159-305	0.266		Plutonium-238	0.036	0.266
SU5-PRS159-306	0.162		Plutonium-238	0.031	0.162
SU5-PRS159-307	3.79		Plutonium-238	0.03	3.790
SU5-PRS159-308	0.112		Plutonium-238	0.026	0.112
SU5-PRS159-309	0.195		Plutonium-238	0.022	0.195
SU5-PRS159-310	0.8		Plutonium-238	0.03	0.800
SU5-PRS159-311	0.9		Plutonium-238	0.09	0.900
SU5-PRS159-312	0.002	U	Plutonium-238	0.04	0.002
SU5-PRS159-313	0.009	U	Plutonium-238	0.042	0.009
SU5-PRS159-314	2.36		Plutonium-238	0.04	2.360
SU5-PRS159-315	0.79		Plutonium-238	0.04	0.790
SU5-PRS159-316	0.19		Plutonium-238	0.038	0.190
SU5-PRS159-317	0.14		Plutonium-238	0.026	0.140
SU5 Pu-238				**Standard Deviation**	**6.326**
				Max Result	**34.900**
				Cleanup Objective	**55.000**
				Hot Spot Criteria	**165.000**

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A92/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU5-PRS159-273	-0.18	U	Protactinium 231	0.77	0.385
SU5-PRS159-274	-1.52	U	Protactinium 231	1.3	0.650
SU5-PRS159-275	0.76	U	Protactinium 231	1.1	0.760
SU5-PRS159-276	-0.04	U	Protactinium 231	0.86	0.430
SU5-PRS159-277	0.13	U	Protactinium 231	1.4	0.130
SU5-PRS159-278	-1.12	U	Protactinium 231	1.2	0.600
SU5-PRS159-279	0.26	U	Protactinium 231	1.1	0.260
SU5-PRS159-280	-0.36	U	Protactinium 231	0.98	0.490
SU5-PRS159-281	0.06	U	Protactinium 231	0.95	0.060
SU5-PRS159-282	-0.53	U	Protactinium 231	0.99	0.495
SU5-PRS159-283	-0.11	U	Protactinium 231	1.7	0.850
SU5-PRS159-283	0.31	U	Protactinium 231	1.7	0.310
SU5-PRS159-284	-1.5	U	Protactinium 231	1.6	0.800
SU5-PRS159-285	0.61	U	Protactinium 231	1.8	0.610
SU5-PRS159-286	0.32	U	Protactinium 231	1.8	0.320
SU5-PRS159-287	-1.18	U	Protactinium 231	1.5	0.750
SU5-PRS159-288	-1.02	U	Protactinium 231	1.5	0.750
SU5-PRS159-289	-0.4	U	Protactinium 231	1.8	0.900
SU5-PRS159-290	-0.04	U	Protactinium 231	1.7	0.850
SU5-PRS159-291	-0.5	U	Protactinium 231	1.3	0.650
SU5-PRS159-292	-0.6	U	Protactinium 231	1.7	0.850
SU5-PRS159-293	-0.6	U	Protactinium 231	1.7	0.850
SU5-PRS159-294	-0.4	U	Protactinium 231	1.7	0.850
SU5-PRS159-295	-1.1	U	Protactinium 231	1.6	0.800
SU5-PRS159-296	1.2	U	Protactinium 231	1.8	1.200
SU5-PRS159-297	-0.86	U	Protactinium 231	1.2	0.600
SU5-PRS159-298	-0.5	U	Protactinium 231	1.8	0.900
SU5-PRS159-299	0.1	U	Protactinium 231	1.7	0.100
SU5-PRS159-300	-0.8	U	Protactinium 231	1.7	0.850
SU5-PRS159-301	-1	U	Protactinium 231	1.8	0.900
SU5-PRS159-302	0.6	U	Protactinium 231	1.7	0.600
SU5-PRS159-303	-0.32	U	Protactinium 231	1.5	0.750
SU5-PRS159-304	-0.8	U	Protactinium 231	1.7	0.850
SU5-PRS159-305	0.5	U	Protactinium 231	1.8	0.500
SU5-PRS159-306	-0.03	U	Protactinium 231	1.7	0.850
SU5-PRS159-307	-0.86	U	Protactinium 231	1.5	0.750
SU5-PRS159-308	0.238	U	Protactinium 231	1.8	0.238
SU5-PRS159-309	-0.53	U	Protactinium 231	0.74	0.370
SU5-PRS159-310	0.11	U	Protactinium 231	0.94	0.110
SU5-PRS159-311	-0.15	U	Protactinium 231	1.4	0.700
SU5-PRS159-312	-0.7	U	Protactinium 231	1.8	0.900
SU5-PRS159-313	-1.3	U	Protactinium 231	1.7	0.850
SU5-PRS159-314	0.7	U	Protactinium 231	1.8	0.700
SU5-PRS159-315	-0.8	U	Protactinium 231	1.7	0.850
SU5-PRS159-316	-1.4	U	Protactinium 231	1.7	0.850
SU5-PRS159-317	-0.09	U	Protactinium 231	1.8	0.900
SU5 Pa-231				**Standard Deviation**	**0.266**
				Max Result	**1.200**
				Cleanup Objective	**4.000**
				Hot Spot Criteria	**11.810**

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A93/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU5-PRS159-273	0.34	J	Radium (226)	0.07	0.340
SU5-PRS159-274	0.51	J	Radium (226)	0.28	0.510
SU5-PRS159-275	0.35	J	Radium (226)	0.18	0.350
SU5-PRS159-276	0.4	J	Radium (226)	0.19	0.400
SU5-PRS159-277	0.56	J	Radium (226)	0.13	0.560
SU5-PRS159-278	0.47	J	Radium (226)	0.24	0.470
SU5-PRS159-279	0.35	J	Radium (226)	0.09	0.350
SU5-PRS159-280	0.52	J	Radium (226)	0.09	0.520
SU5-PRS159-281	0.51	J	Radium (226)	0.09	0.510
SU5-PRS159-282	0.48	J	Radium (226)	0.22	0.480
SU5-PRS159-283	0.57	J	Radium (226)	0.15	0.570
SU5-PRS159-283	0.42	J	Radium (226)	0.31	0.420
SU5-PRS159-284	0.47	J	Radium (226)	0.36	0.470
SU5-PRS159-285	0.53	J	Radium (226)	0.17	0.530
SU5-PRS159-286	0.42	J	Radium (226)	0.29	0.420
SU5-PRS159-287	0.62	J	Radium (226)	0.13	0.620
SU5-PRS159-288	0.63	J	Radium (226)	0.36	0.630
SU5-PRS159-289	0.55	J	Radium (226)	0.16	0.550
SU5-PRS159-290	0.48	J	Radium (226)	0.16	0.480
SU5-PRS159-291	0.47	J	Radium (226)	0.28	0.470
SU5-PRS159-292	0.5	J	Radium (226)	0.3	0.500
SU5-PRS159-293	0.49	J	Radium (226)	0.3	0.490
SU5-PRS159-294	0.83	J	Radium (226)	0.14	0.830
SU5-PRS159-295	0.6	J	Radium (226)	0.34	0.600
SU5-PRS159-296	0.44	J	Radium (226)	0.12	0.440
SU5-PRS159-297	0.34	J	Radium (226)	0.28	0.340
SU5-PRS159-298	0.61	J	Radium (226)	0.35	0.610
SU5-PRS159-299	0.44	J	Radium (226)	0.27	0.440
SU5-PRS159-300	0.72	J	Radium (226)	0.34	0.720
SU5-PRS159-301	0.62	J	Radium (226)	0.35	0.620
SU5-PRS159-302	0.89	J	Radium (226)	0.12	0.890
SU5-PRS159-303	0.43	J	Radium (226)	0.29	0.430
SU5-PRS159-304	0.46	J	Radium (226)	0.35	0.460
SU5-PRS159-305	0.48	J	Radium (226)	0.28	0.480
SU5-PRS159-306	0.25	U	Radium (226)	0.26	0.250
SU5-PRS159-307	0.4	J	Radium (226)	0.3	0.400
SU5-PRS159-308	0.37	J	Radium (226)	0.27	0.370
SU5-PRS159-309	0.31	J	Radium (226)	0.23	0.310
SU5-PRS159-310	0.115	U	Radium (226)	0.14	0.115
SU5-PRS159-311	0.33	J	Radium (226)	0.24	0.330
SU5-PRS159-312	0.95	J	Radium (226)	0.41	0.950
SU5-PRS159-313	0.73	J	Radium (226)	0.41	0.730
SU5-PRS159-314	0.65	J	Radium (226)	0.14	0.650
SU5-PRS159-315	0.69	J	Radium (226)	0.38	0.690
SU5-PRS159-316	0.63	J	Radium (226)	0.32	0.630
SU5-PRS159-317	0.59	J	Radium (226)	0.37	0.590
SU5 Ra-226				**Standard Deviation**	**0.161**
				Max Result	**0.950**
				Cleanup Objective	**2.900**
				Hot Spot Criteria	**4.700**

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A94/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU5-PRS159-273	0.79		Thorium-230	0.02	0.790
SU5-PRS159-274	0.96		Thorium-230	0.04	0.960
SU5-PRS159-275	0.86		Thorium-230	0.03	0.860
SU5-PRS159-276	0.93		Thorium-230	0.03	0.930
SU5-PRS159-277	0.92		Thorium-230	0.03	0.920
SU5-PRS159-278	0.79		Thorium-230	0.03	0.790
SU5-PRS159-279	0.98		Thorium-230	0.02	0.980
SU5-PRS159-280	0.81		Thorium-230	0.03	0.810
SU5-PRS159-281	0.69		Thorium-230	0.03	0.690
SU5-PRS159-282	0.92		Thorium-230	0.03	0.920
SU5-PRS159-283	0.72		Thorium-230	0.06	0.720
SU5-PRS159-283	1.01		Thorium-230	0.07	1.010
SU5-PRS159-284	0.74		Thorium-230	0.47	0.740
SU5-PRS159-285	1.01		Thorium-230	0.05	1.010
SU5-PRS159-286	1		Thorium-230	0.05	1.000
SU5-PRS159-287	1.02		Thorium-230	0.04	1.020
SU5-PRS159-288	1.02		Thorium-230	0.05	1.020
SU5-PRS159-289	0.95		Thorium-230	0.04	0.950
SU5-PRS159-290	1.05		Thorium-230	0.09	1.050
SU5-PRS159-291	1.06		Thorium-230	0.06	1.060
SU5-PRS159-292	1.07		Thorium-230	0.21	1.070
SU5-PRS159-293	1.24		Thorium-230	0.06	1.240
SU5-PRS159-294	0.81		Thorium-230	0.03	0.810
SU5-PRS159-295	1.2		Thorium-230	0.06	1.200
SU5-PRS159-296	**4.26**		**Thorium-230**	**0.07**	**4.260**
SU5-PRS159-297	1.15		Thorium-230	0.08	1.150
SU5-PRS159-298	1.36		Thorium-230	0.05	1.360
SU5-PRS159-299	1.14		Thorium-230	0.07	1.140
SU5-PRS159-300	1.55		Thorium-230	0.08	1.550
SU5-PRS159-301	2.06		Thorium-230	0.06	2.060
SU5-PRS159-302	1.28		Thorium-230	0.03	1.280
SU5-PRS159-303	0.83		Thorium-230	0.05	0.830
SU5-PRS159-304	1.04		Thorium-230	0.04	1.040
SU5-PRS159-305	1.03		Thorium-230	0.07	1.030
SU5-PRS159-306	0.62		Thorium-230	0.02	0.620
SU5-PRS159-307	0.65		Thorium-230	0.03	0.650
SU5-PRS159-308	0.74		Thorium-230	0.08	0.740
SU5-PRS159-309	0.37		Thorium-230	0.03	0.370
SU5-PRS159-310	0.3		Thorium-230	0.02	0.300
SU5-PRS159-311	0.76		Thorium-230	0.13	0.760
SU5-PRS159-312	1.31		Thorium-230	0.04	1.310
SU5-PRS159-313	0.88		Thorium-230	0.03	0.880
SU5-PRS159-314	1.09		Thorium-230	0.04	1.090
SU5-PRS159-315	0.9		Thorium-230	0.02	0.900
SU5-PRS159-316	0.89		Thorium-230	0.04	0.890
SU5-PRS159-317	0.71		Thorium-230	0.04	0.710
SU5 Th-230				**Standard Deviation**	**0.565**
				Max Result	**4.260**
				Cleanup Objective	**2.800**
				Hot Spot Criteria	**4.600**

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A95/146

Offsite COC Verification Results

(pCi/g)

Location	Result	Lab Qualifier	Analyte	MDA	Value Used
SU5-PRS159-273	0.43		Thorium-232	0.01	0.430
SU5-PRS159-274	1.12		Thorium-232	0.04	1.120
SU5-PRS159-275	0.43		Thorium-232	0.02	0.430
SU5-PRS159-276	0.51		Thorium-232	0.02	0.510
SU5-PRS159-277	1.1		Thorium-232	0.02	1.100
SU5-PRS159-278	0.65		Thorium-232	0.03	0.650
SU5-PRS159-279	0.53		Thorium-232	0.01	0.530
SU5-PRS159-280	0.83		Thorium-232	0.03	0.830
SU5-PRS159-281	0.72		Thorium-232	0.03	0.720
SU5-PRS159-282	0.61		Thorium-232	0.02	0.610
SU5-PRS159-283	0.51		Thorium-232	0.08	0.510
SU5-PRS159-283	0.58		Thorium-232	0.1	0.580
SU5-PRS159-284	0.79		Thorium-232	0.34	0.790
SU5-PRS159-285	1.14		Thorium-232	0.08	1.140
SU5-PRS159-286	0.72		Thorium-232	0.04	0.720
SU5-PRS159-287	0.79		Thorium-232	0.04	0.790
SU5-PRS159-288	1.05		Thorium-232	0.06	1.050
SU5-PRS159-289	1.55		Thorium-232	0.06	1.550
SU5-PRS159-290	1.27		Thorium-232	0.05	1.270
SU5-PRS159-291	1.19		Thorium-232	0.05	1.190
SU5-PRS159-292	1.03		Thorium-232	0.12	1.030
SU5-PRS159-293	1.38		Thorium-232	0.05	1.380
SU5-PRS159-294	0.99		Thorium-232	0.06	0.990
SU5-PRS159-295	1.07		Thorium-232	0.03	1.070
SU5-PRS159-296	0.62		Thorium-232	0.07	0.620
SU5-PRS159-297	0.84		Thorium-232	0.07	0.840
SU5-PRS159-298	0.86		Thorium-232	0.08	0.860
SU5-PRS159-299	0.97		Thorium-232	0.09	0.970
SU5-PRS159-300	1.23		Thorium-232	0.11	1.230
SU5-PRS159-301	1.22		Thorium-232	0.12	1.220
SU5-PRS159-302	0.66		Thorium-232	0.03	0.660
SU5-PRS159-303	1		Thorium-232	0.06	1.000
SU5-PRS159-304	0.95		Thorium-232	0.06	0.950
SU5-PRS159-305	1.11		Thorium-232	0.05	1.110
SU5-PRS159-306	0.75		Thorium-232	0.03	0.750
SU5-PRS159-307	0.73		Thorium-232	0.03	0.730
SU5-PRS159-308	0.66		Thorium-232	0.04	0.660
SU5-PRS159-309	0.171		Thorium-232	0.031	0.171
SU5-PRS159-310	0.167		Thorium-232	0.04	0.167
SU5-PRS159-311	0.53		Thorium-232	0.12	0.530
SU5-PRS159-312	1.12		Thorium-232	0.02	1.120
SU5-PRS159-313	0.9		Thorium-232	0.03	0.900
SU5-PRS159-314	1.34		Thorium-232	0.06	1.340
SU5-PRS159-315	1.21		Thorium-232	0.04	1.210
SU5-PRS159-316	1.19		Thorium-232	0.02	1.190
SU5-PRS159-317	0.78		Thorium-232	0.04	0.780
SU5 Th-232				**Standard Deviation**	**0.314**
				Max Result	**1.550**
				Cleanup Objective	**2.100**
				Hot Spot Criteria	**3.500**

MDA: minimum detectable activity
J: estimated U: not detected

EXHIBIT 2

A96/146

Recalculation of N for SU2

Sample Standard Deviation (s)	Radionuclide	Cleanup Objective	Units
	Ac-227+D	4.6	(pCi/g)
	Am-241	63	(pCi/g)
	Ce-141	38	(pCi/g)
	Cs-137+D	3.8	(pCi/g)
	Co-60	0.7	(pCi/g)
	Cu-244	92	(pCi/g)
	Pb-210+D	7.4	(pCi/g)
	Np-237+D	10.4	(pCi/g)
	Ni-95	2.5	(pCi/g)
7.234	Pu-238	55	(pCi/g)
	Pu-239/240	62	(pCi/g)
	Pa-231+D	4	(pCi/g)
	Ra-226+D	2.9	(pCi/g)
	Ra-228	2.1	(pCi/g)
	Th-228+D	2.6	(pCi/g)
0.292	Th-230+D	2.8	(pCi/g)
0.427	Th-232+D	2.1	(pCi/g)
	U-233+D	4.8	(pCi/g)
	U-234	106.1	(pCi/g)
	U-234+D	2	(pCi/g)
	U-235	16.11	(pCi/g)
	U-235+D	3.2	(pCi/g)
	U-238	121.2	(pCi/g)
	U-238+D	2.2	(pCi/g)
	Bi-207	1.2	(pCi/g)
	Bi-210m	8.3	(pCi/g)
	Tc-99	2140	(pCi/g)
	tritium	7580	(pCi/g)
	Sr-90	94.72	(pCi/g)

Type I Error	0.05
$Z_{1\text{-alpha}}$	1.645
Type II Error	0.2
$Z_{1\text{-beta}}$	0.842
Effective	0.26 (s)
Sign p	0.864334

Calculate the Total Effective (s)

Estimate (N) - Sign Test

DCGL	1
LBGR	0.70
Delta	0.30
(s)	0.26
Rel Shift	1.138
(N)	15.00

Pu-238 Area Factor (N) 928

Sample Grid Spacing

SU Area	1,605.18	m^2
Grid Length	9.6	m
Grid Height	8.3	m

Sample Grid Spacing

SU Area	17,260	ft^2
Grid Length	31.6	ft
Grid Height	27.4	ft

PRSs

Survey Unit 2

4/19/06 4:24 PM

EXHIBIT 3
A97/146

Recalculation of N for SU3

Sample Standard Deviation (s)	Radionuclide	Cleanup Objective	Units
	Ac-227+D	4.6	(pCi/g)
	Am-241	63	(pCi/g)
	Ce-141	38	(pCi/g)
	Cs-137+D	3.8	(pCi/g)
	Co-60	0.7	(pCi/g)
	Cu-244	92	(pCi/g)
	Pb-210+D	7.4	(pCi/g)
	Np-237+D	10.4	(pCi/g)
	Ni-95	2.5	(pCi/g)
18.925	Pu-238	55	(pCi/g)
	Pu-239/240	62	(pCi/g)
	Pa-231+D	4	(pCi/g)
	Ra-226+D	2.9	(pCi/g)
	Ra-228	2.1	(pCi/g)
	Th-228+D	2.6	(pCi/g)
0.167	Th-230+D	2.8	(pCi/g)
0.191	Th-232+D	2.1	(pCi/g)
	U-233+D	4.8	(pCi/g)
	U-234	106.1	(pCi/g)
	U-234+D	2	(pCi/g)
	U-235	16.11	(pCi/g)
	U-235+D	3.2	(pCi/g)
	U-238	121.2	(pCi/g)
	U-238+D	2.2	(pCi/g)
	Bi-207	1.2	(pCi/g)
	Bi-210m	8.3	(pCi/g)
	Tc-99	2140	(pCi/g)
	tritium	7580	(pCi/g)
	Sr-90	94.72	(pCi/g)

Type I Error	0.05		
$Z_{1\text{-alpha}}$	1.645		
Type II Error	0.2		
$Z_{1\text{-beta}}$	0.842		
Effective	0.36	*(s)*	
Sign p	0.864334		

Calculate the Total Effective (s)

Estimate (N) - Sign Test

DCGL	1
LBGR	0.60
Delta	0.40
(s)	0.36
Rel Shift	1.108
(N)	15.00

Pu-238 Area Factor (N) 937

Sample Grid Spacing

SU Area	1,620.34	m^2
Grid Length	9.7	m
Grid Height	8.4	m

Sample Grid Spacing

SU Area	17423	ft^2
Grid Length	31.7	ft
Grid Height	27.5	ft

PRSs

Survey Unit 3

4/19/06 4:27 PM

EXHIBIT 3 A98/146

Recalculation of N for SU4

Sample Standard Deviation (s)	Radionuclide	Cleanup Objective	Units
	Ac-227+D	4.6	(pCi/g)
	Am-241	63	(pCi/g)
	Ce-141	38	(pCi/g)
	Cs-137+D	3.8	(pCi/g)
	Co-60	0.7	(pCi/g)
	Cu-244	92	(pCi/g)
	Pb-210+D	7.4	(pCi/g)
	Np-237+D	10.4	(pCi/g)
	Ni-95	2.5	(pCi/g)
13.327	Pu-238	55	(pCi/g)
	Pu-239/240	62	(pCi/g)
	Pa-231+D	4	(pCi/g)
	Ra-226+D	2.9	(pCi/g)
	Ra-228	2.1	(pCi/g)
	Th-228+D	2.6	(pCi/g)
0.161	Th-230+D	2.8	(pCi/g)
0.28	Th-232+D	2.1	(pCi/g)
	U-233+D	4.8	(pCi/g)
	U-234	106.1	(pCi/g)
	U-234+D	2	(pCi/g)
	U-235	16.11	(pCi/g)
	U-235+D	3.2	(pCi/g)
	U-238	121.2	(pCi/g)
	U-238+D	2.2	(pCi/g)
	Bi-207	1.2	(pCi/g)
	Bi-210m	8.3	(pCi/g)
	Tc-99	2140	(pCi/g)
	tritium	7580	(pCi/g)
	Sr-90	94.72	(pCi/g)

Type I Error	0.05	
$Z_{1\text{-alpha}}$	1.645	
Type II Error	0.2	
$Z_{1\text{-beta}}$	0.842	
Effective	0.28	*(s)*
Sign p	0.919243	

Calculate the Total Effective (s)

Estimate (N) - Sign Test

DCGL	1
LBGR	0.60
Delta	0.40
(s)	0.28
Rel Shift	1.416
(N)	11.00

Pu-238 Area Factor (N) 837

Sample Grid Spacing

SU Area	1,447.17	m^2
Grid Length	10.7	m
Grid Height	9.2	m

Sample Grid Spacing

SU Area	15561	ft^2
Grid Length	35.0	ft
Grid Height	30.3	ft

PRSs

Survey Unit 4

4/19/06 4:29 PM

EXHIBIT 3 009/146

Recalculation of N for SU5

Sample Standard Deviation (s)	Radionuclide	Cleanup Objective	Units
0.461	Ac-227+D	4.6	(pCi/g)
	Am-241	63	(pCi/g)
	Ce-141	38	(pCi/g)
	Cs-137+D	3.8	(pCi/g)
	Co-60	0.7	(pCi/g)
	Cu-244	92	(pCi/g)
0.55	Pb-210+D	7.4	(pCi/g)
	Np-237+D	10.4	(pCi/g)
	Ni-95	2.5	(pCi/g)
6.326	Pu-238	55	(pCi/g)
	Pu-239/240	62	(pCi/g)
0.266	Pa-231+D	4	(pCi/g)
0.161	Ra-226+D	2.9	(pCi/g)
	Ra-228	2.1	(pCi/g)
	Th-228+D	2.6	(pCi/g)
0.565	Th-230+D	2.8	(pCi/g)
0.314	Th-232+D	2.1	(pCi/g)
	U-233+D	4.8	(pCi/g)
	U-234	106.1	(pCi/g)
	U-234+D	2	(pCi/g)
	U-235	16.11	(pCi/g)
	U-235+D	3.2	(pCi/g)
	U-238	121.2	(pCi/g)
	U-238+D	2.2	(pCi/g)
	Bi-207	1.2	(pCi/g)
	Bi-210m	8.3	(pCi/g)
	Tc-99	2140	(pCi/g)
	tritium	7580	(pCi/g)
	Sr-90	94.72	(pCi/g)

Type I Error	0.05	
$Z_{1\text{-alpha}}$	1.645	
Type II Error	0.2	
$Z_{1\text{-beta}}$	0.842	
Effective	0.32	*(s)*
Sign p	0.884930	

Calculate the Total Effective (s)

Estimate (N) - Sign Test

DCGL	1
LBGR	0.60
Delta	0.40
(s)	0.32
Rel Shift	1.269
(N)	12.00

Pu-238 Area Factor (N) 498

Sample Grid Spacing

SU Area	861.46	m^2
Grid Length	7.9	m
Grid Height	6.8	m

Sample Grid Spacing

SU Area	9263	ft^2
Grid Length	25.9	ft
Grid Height	22.4	ft

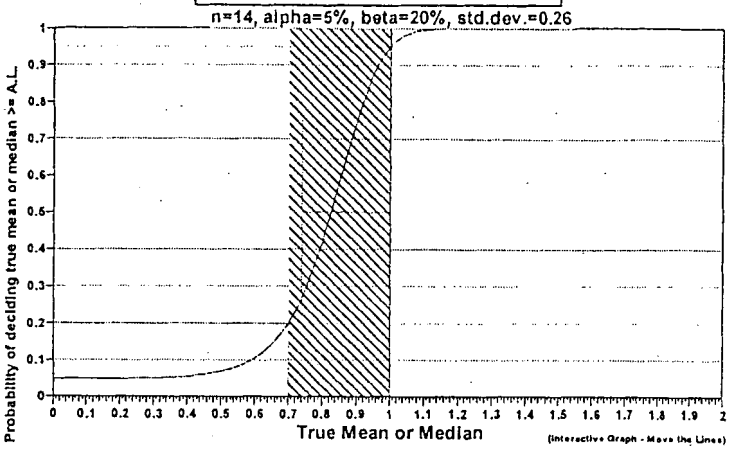
PRSs

Survey Unit 5

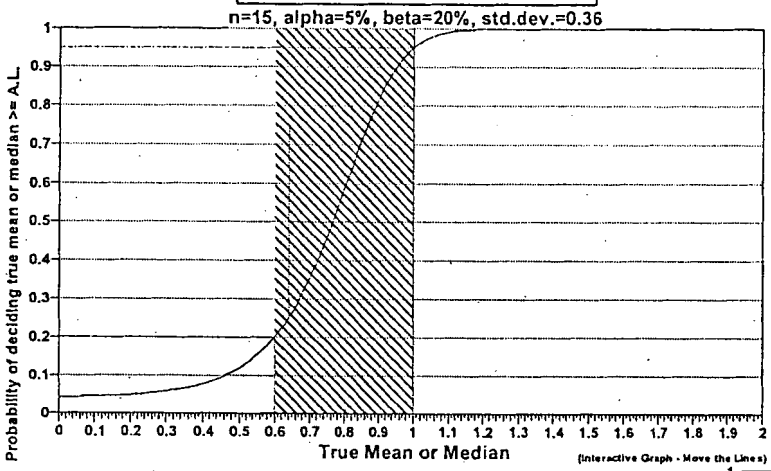
4/19/06 4:32 PM

EXHIBIT 3 A100/146

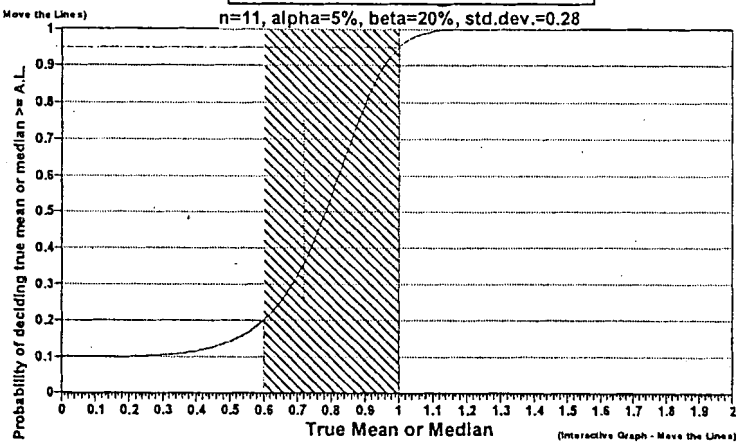
SU2 Power Curve



SU3 Power Curve



SU4 Power Curve



SU5 Power Curve

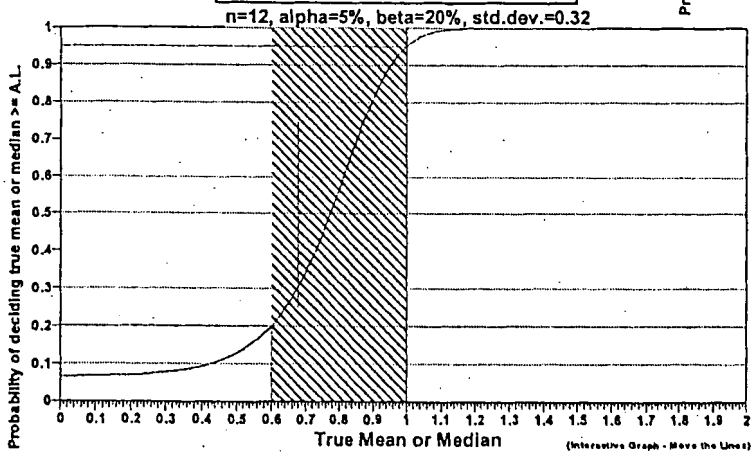


EXHIBIT 3

A101/146

Sign Test for Pu-238 at SU3

PRS 159 Sample ID	Survey Unit	Sample Depth (ft)	Max probe depth (ft) bgs	Offsite analysis (pCi/g) Pu-238 result	Pu-238 MDA	Sign Test
SU3-PRS159-104	3	surface		0.105	0.029	+
SU3-PRS159-105	3	surface		0.56	0.06	+
SU3-PRS159-106	3	surface		0.69	0.03	+
SU3-PRS159-107	3	surface		0.03	0.028	+
SU3-PRS159-108	3	surface		0.114	0.054	+
SU3-PRS159-109	3	surface		0.48	0.08	+
SU3-PRS159-110	3	surface		1.27	0.06	+
SU3-PRS159-111	3	surface		0.5	0.06	+
SU3-PRS159-112	3	surface		0.22	0.06	+
SU3-PRS159-113	3	surface		1.25	0.07	+
SU3-PRS159-114	3	surface		0.64	0.05	+
SU3-PRS159-115	3	surface		-0.009	0.056	+
SU3-PRS159-116	3	surface		0.014	0.064	+
SU3-PRS159-117	3	surface		0.109	0.051	+
SU3-PRS159-118	3	surface		0.157	0.055	+
SU3-PRS159-119	3	surface		0.109	0.065	+
SU3-PRS159-120	3	surface		2.21	0.06	+
SU3-PRS159-121	3	surface		0.8	0.06	+
SU3-PRS159-122	3	surface		**87**	**0.05**	-
SU3-PRS159-123	3	surface		0.03	0.054	+
SU3-PRS159-124	3	surface		-0.023	0.084	+
SU3-PRS159-125	3	surface		3.03	0.05	+
SU3-PRS159-126	3	surface		0.119	0.079	+
SU3-PRS159-127	3	surface		0.91	0.06	+
SU3-PRS159-128	3	surface		8.2	0.09	+
SU3-PRS159-129	3	surface		42	0.08	+
SU3-PRS159-130	3	surface		0.018	0.026	+
SU3-PRS159-131	3	surface		2.94	0.04	+
SU3-PRS159-132	3	surface		0.006	0.035	+
SU3-PRS159-133	3	surface		0.316	0.035	+
SU3-PRS159-134	3	surface		0.274	0.033	+
SU3-PRS159-135	3	surface		15.8	0.05	+
SU3-PRS159-136	3	surface		25.2	0.08	+
SU3-PRS159-137	3	surface		**149**	**0.1**	-
SU3-PRS159-138	3	surface		10	0.03	+
SU3-PRS159-139	3	surface		0.003	0.05	+
SU3-PRS159-140	3	surface		1.51	0.03	+
SU3-PRS159-141	3	surface		0.405	0.038	+
SU3-PRS159-142	3	surface		5.23	0.03	+
SU3-PRS159-143	3	surface		17.6	0.04	+
SU3-PRS159-144	3	surface		0.74	0.03	+
SU3-PRS159-145	3	surface		8.92	0.04	+
SU3-PRS159-146	3	surface		0.059	0.031	+
SU3-PRS159-147	3	surface		0.203	0.034	+
SU3-PRS159-148	3	surface		0.4	0.036	+
SU3-PRS159-149	3	surface		0.411	0.03	+

EXHIBIT 4

A102/146

Sign Test for Pu-238 at SU3

SU3-PRS159-150	3	surface		0.01	0.029	+
SU3-PRS159-151	3	surface		0.03	0.031	+
SU3-PRS159-152	3	surface		0.016	0.033	+
SU3-PRS159-153	3	surface		3.73	0.03	+
SU3-PRS159-154	3	surface		7.04	0.03	+
SU3-PRS159-155	3	surface		2.13	0.02	+
SU3-PRS159-156	3	surface		0.01	0.024	+
SU3-PRS159-157	3	surface		0.016	0.03	+
SU3-PRS159-158	3	surface		0.084	0.033	+
SU3-PRS159-159	3	surface		0.023	0.024	+
SU3-PRS159-160	3	surface		7.3	0.03	+
SU3-PRS159-161	3	surface		0.9	0.03	+
SU3-PRS159-162	3	surface		1.66	0.04	+
SU3-PRS159-163	3	surface		0.9	0.02	+
SU3-PRS159-164	3	surface		0.039	0.034	+
SU3-PRS159-165	3	surface		0.023	0.028	+
SU3-PRS159-166	3	surface		1.06	0.03	+
SU3-PRS159-167	3	surface		4.79	0.02	+
SU3-PRS159-168	3	surface		0.218	0.038	+
SU3-PRS159-169	3	surface		0.15	0.028	+
SU3-PRS159-170	3	surface		0.5	0.03	+
SU3-PRS159-171	3	surface		0.045	0.034	+
SU3-PRS159-172	3	surface		1.07	0.03	+
SU3-PRS159-173	3	surface		0.108	0.035	+
SU3-PRS159-174	3	surface		0.04	0.026	+
SU3-PRS159-175	3	surface		0.124	0.025	+
SU3-PRS159-176	3	surface		1.09	0.03	+
SU3-PRS159-177	3	surface		0.316	0.035	+
SU3-PRS159-178	3	surface		0.181	0.022	+
SU3-PRS159-179	3	surface		0.065	0.03	+
SU3-PRS159-180	3	surface		0.017	0.029	+
SU3-PRS159-181	3	surface		0.089	0.021	+
SU3-PRS159-182	3	surface		0.022	0.037	+
SU3-PRS159-183	3	surface		4.12	0.02	+
SU3-PRS159-184	3	surface		1.28	0.04	+
SU3-PRS159-185	3	surface		4.23	0.02	+
SU3-PRS159-186	3	surface		27	0.03	+
SU3-PRS159-187	3	surface		1.03	0.02	+
SU3-PRS159-188	3	surface		0.085	0.029	+
SU3-PRS159-189	3	surface		0.47	0.02	+
SU3-PRS159-190	3	surface		1.98	0.03	+
SU3-PRS159-191	3	surface		0.038	0.023	+
SU3-PRS159-192	3	surface		6.52	0.03	+

CO	55	**Sum:**	**87**
Hot Spot	165	**k Crit**	53
Max Obs	149.000	from Table I.3 MARSSIM	
Mean	5.282		
Standard Deviation	18.9251	P/F	**PASS**
Number of Samples	89		

EXHIBIT 4

A103/146

Sign Test for Pu-238 at SU4

PRS 159 Sample ID	Survey Unit	Sample Depth (ft)	Max probe depth (ft) bgs	Offsite analysis (pCi/g) Pu-238 result	Pu-238 MDA	Sign Test
SU4-PRS159-193	4	surface		-0.006	0.041	+
SU4-PRS159-194	4	surface		0.261	0.041	+
SU4-PRS159-195	4	surface		0.029	0.044	+
SU4-PRS159-196	4	surface		1.06	0.04	+
SU4-PRS159-197	4	surface		4.17	0.05	+
SU4-PRS159-198	4	surface		1.57	0.03	+
SU4-PRS159-199	4	surface		17.5	0.04	+
SU4-PRS159-200	4	surface		2.87	0.04	+
SU4-PRS159-201	4	surface		0.203	0.078	+
SU4-PRS159-202	4	surface		0.72	0.04	+
SU4-PRS159-203	4	surface		0.061	0.039	+
SU4-PRS159-204	4	surface		0.104	0.026	+
SU4-PRS159-205	4	surface		51.5	0.03	+
SU4-PRS159-206	4	surface		0.108	0.081	+
SU4-PRS159-207	4	surface		0.058	0.03	+
SU4-PRS159-208	4	surface		0.78	0.03	+
SU4-PRS159-209	4	surface		1.54	0.03	+
SU4-PRS159-210	4	surface		0.028	0.03	+
SU4-PRS159-211	4	surface		4.75	0.03	+
SU4-PRS159-212	4	surface		2.56	0.02	+
SU4-PRS159-213	4	surface		98	0.06	-
SU4-PRS159-214	4	surface		0.037	0.023	+
SU4-PRS159-215	4	surface		2.23	0.03	+
SU4-PRS159-216	4	surface		0.147	0.027	+
SU4-PRS159-217	4	surface		20.7	0.02	+
SU4-PRS159-218	4	surface		22.3	0.05	+
SU4-PRS159-219	4	surface		28.6	0.08	+
SU4-PRS159-220	4	surface		25.7	0.07	+
SU4-PRS159-221	4	surface		4.76	0.05	+
SU4-PRS159-222	4	surface		3.43	0.03	+
SU4-PRS159-223	4	surface		0.062	0.035	+
SU4-PRS159-224	4	surface		2.4	0.06	+
SU4-PRS159-225	4	surface		0.26	0.06	+
SU4-PRS159-226	4	surface		5.3	0.05	+
SU4-PRS159-227	4	surface		3.2	0.05	+
SU4-PRS159-228	4	surface		2.57	0.06	+
SU4-PRS159-230	4	surface		2.22	0.08	+
SU4-PRS159-231	4	surface		0.233	0.046	+
SU4-PRS159-232	4	surface		0.11	0.079	+
SU4-PRS159-233	4	surface		1.88	0.06	+
SU4-PRS159-234	4	surface		5.48	0.08	+
SU4-PRS159-235	4	surface		3.35	0.09	+
SU4-PRS159-236	4	surface		0.27	0.08	+
SU4-PRS159-237	4	surface		0.43	0.09	+

EXHIBIT 4

Sign Test for Pu-238 at SU4

SU4-PRS159-238	4	surface		1.47	0.07	+
SU4-PRS159-239	4	surface		13.6	0.1	+
SU4-PRS159-240	4	surface		0.093	0.057	+
SU4-PRS159-241	4	surface		11.6	0.09	+
SU4-PRS159-242	4	surface		28.1	0.02	+
SU4-PRS159-243	4	surface		0.009	0.019	+
SU4-PRS159-244	4	surface		0.92	0.02	+
SU4-PRS159-245	4	surface		0.216	0.025	+
SU4-PRS159-246	4	surface		0.305	0.029	+
SU4-PRS159-247	4	surface		0.244	0.019	+
SU4-PRS159-248	4	surface		0.072	0.026	+
SU4-PRS159-249	4	surface		1.32	0.02	+
SU4-PRS159-250	4	surface		0.018	0.026	+
SU4-PRS159-251	4	surface		7.66	0.04	+
SU4-PRS159-252	4	surface		0.45	0.037	+
SU4-PRS159-253	4	surface		0.159	0.041	+
SU4-PRS159-254	4	surface		1.52	0.03	+
SU4-PRS159-255	4	surface		2.58	0.04	+
SU4-PRS159-256	4	surface		1.44	0.03	+
SU4-PRS159-257	4	surface		3.91	0.05	+
SU4-PRS159-258	4	surface		1.85	0.04	+
SU4-PRS159-259	4	surface		2.09	0.01	+
SU4-PRS159-260	4	surface		0.337	0.027	+
SU4-PRS159-261	4	surface		0.61	0.04	+
SU4-PRS159-262	4	surface		1.36	0.04	+
SU4-PRS159-263	4	surface		2.41	0.04	+
SU4-PRS159-264	4	surface		0.239	0.04	+
SU4-PRS159-265	4	surface		7.64	0.04	+
SU4-PRS159-266	4	surface		2.85	0.04	+
SU4-PRS159-267	4	surface		1.31	0.04	+
SU4-PRS159-268	4	surface		12.7	0.04	+
SU4-PRS159-269	4	surface		1.61	0.08	+
SU4-PRS159-270	4	surface		3.73	0.03	+
SU4-PRS159-271	4	surface		2.53	0.03	+
SU4-PRS159-272	4	surface		5.87	0.03	+
SU4-PRS159-325	4	surface		0.087	0.068	+
SU4-PRS159-326	4	surface		0.16	0.11	+

CO	55	**Sum:**	**80**
Hot Spot	165	**k Crit**	48
Max Obs	98.000	from Table I.3 MARSSIM	
Mean	5.514		
Standard Deviation	13.3270	P/F	**PASS**
Number of Samples	81		

EXHIBIT 4

A105/146

Sign Test for Th-230 at SU5

PRS 159 Sample ID	Survey Unit	Sample Depth (ft)	Max probe depth (ft) bgs	Offsite analysis (pCi/g) Th-230 result	Th-230 MDA	Sign Test
SU5-PRS159-273	5	surface		0.79	0.02	+
SU5-PRS159-274	5	surface		0.96	0.04	+
SU5-PRS159-275	5	surface		0.86	0.03	+
SU5-PRS159-276	5	surface		0.93	0.03	+
SU5-PRS159-277	5	surface		0.92	0.03	+
SU5-PRS159-278	5	surface		0.79	0.03	+
SU5-PRS159-279	5	surface		0.98	0.02	+
SU5-PRS159-280	5	surface		0.81	0.03	+
SU5-PRS159-281	5	surface		0.69	0.03	+
SU5-PRS159-282	5	surface		0.92	0.03	+
SU5-PRS159-283	5	surface		0.72	0.06	+
SU5-PRS159-283	5	surface		1.01	0.07	+
SU5-PRS159-284	5	surface		0.74	0.47	+
SU5-PRS159-285	5	surface		1.01	0.05	+
SU5-PRS159-286	5	surface		1	0.05	+
SU5-PRS159-287	5	surface		1.02	0.04	+
SU5-PRS159-288	5	surface		1.02	0.05	+
SU5-PRS159-289	5	surface		0.95	0.04	+
SU5-PRS159-290	5	surface		1.05	0.09	+
SU5-PRS159-291	5	surface		1.06	0.06	+
SU5-PRS159-292	5	surface		1.07	0.21	+
SU5-PRS159-293	5	surface		1.24	0.06	+
SU5-PRS159-294	5	surface		0.81	0.03	+
SU5-PRS159-295	5	surface		1.2	0.06	+
SU5-PRS159-296	5	surface		**4.26**	**0.07**	-
SU5-PRS159-297	5	surface		1.15	0.08	+
SU5-PRS159-298	5	surface		1.36	0.05	+
SU5-PRS159-299	5	surface		1.14	0.07	+
SU5-PRS159-300	5	surface		1.55	0.08	+
SU5-PRS159-301	5	surface		2.06	0.06	+
SU5-PRS159-302	5	surface		1.28	0.03	+
SU5-PRS159-303	5	surface		0.83	0.05	+
SU5-PRS159-304	5	surface		1.04	0.04	+
SU5-PRS159-305	5	surface		1.03	0.07	+
SU5-PRS159-306	5	surface		0.62	0.02	+
SU5-PRS159-307	5	surface		0.65	0.03	+
SU5-PRS159-308	5	surface		0.74	0.08	+
SU5-PRS159-309	5	surface		0.37	0.03	+
SU5-PRS159-310	5	surface		0.3	0.02	+
SU5-PRS159-311	5	surface		0.76	0.13	+
SU5-PRS159-312	5	surface		1.31	0.04	+
SU5-PRS159-313	5	surface		0.88	0.03	+
SU5-PRS159-314	5	surface		1.09	0.04	+
SU5-PRS159-315	5	surface		0.9	0.02	+
SU5-PRS159-316	5	surface		0.89	0.04	+
SU5-PRS159-317	5	surface		0.71	0.1	+

CO	2.8	**Sum:**	**45**
Hot Spot	4.6	**k Crit**	29
Max Obs	4.260	from Table I.3 MARSSIM	
Mean	1.032		
Standard Deviation	0.5646	P/F	PASS
Number of Samples	46		

EXHIBIT 4

A106/146

95% UCL for Pu-238 at SU3

Data File		Variable:	0.105
Raw Statistics		Normal Distribution Test	
Number of Valid Samples	89	Lilliefors Test Statisitic	0.389618
Number of Unique Samples	80	Lilliefors 5% Critical Value	0.093916
Minimum	-0.023	Data not normal at 5% significance level	
Maximum	149		
Mean	5.282011	95% UCL (Assuming Normal Distribution)	
Median	0.411	Student's-t UCL	8.616788
Standard Deviation	18.92511		
Variance	358.1597		
Coefficient of Variation	3.582936		
Skewness	6.134513		
Gamma Statistics Not Available			
Lognormal Statistics Not Available			
		95% Non-parametric UCLs	
Data are Non-parametric (0.05)		CLT UCL	8.581682
RECOMMENDATION		Adj-CLT UCL (Adjusted for skewness)	9.975509
Use 95% Chebyshev (Mean, Sd) UCL		Mod-t UCL (Adjusted for skewness)	8.834197
		Jackknife UCL	8.616788
		Standard Bootstrap UCL	8.602775
		Bootstrap-t UCL	14.00764
Therefore, the 95% UCL		Hall's Bootstrap UCL	21.24192
		Percentile Bootstrap UCL	8.899112
PASSES		BCA Bootstrap UCL	10.67831
		95% Chebyshev (Mean, Sd) UCL	14.02621
when compared to the cleanup objective		97.5% Chebyshev (Mean, Sd) UCL	17.80984
of 55 pCi/g		99% Chebyshev (Mean, Sd) UCL	25.24203

EXHIBIT 4

A107/146

95% UCL for Pu-238 at SU4

Data File		Variable:	-0.006
Raw Statistics		Normal Distribution Test	
Number of Valid Samples	81	Lilliefors Test Statisitic	0.339375
Number of Unique Samples	81	Lilliefors 5% Critical Value	0.098444
Minimum	-0.006	Data not normal at 5% significance level	
Maximum	98		
Mean	5.51363	95% UCL (Assuming Normal Distribution)	
Median	1.52	Student's-t UCL	7.977829
Standard Deviation	13.32701		
Variance	177.6091		
Coefficient of Variation	2.417102		
Skewness	5.01028		
Gamma Statistics Not Available			
Lognormal Statistics Not Available			
		95% Non-parametric UCLs	
		CLT UCL	7.949293
Data are Non-parametric (0.05)		Adj-CLT UCL (Adjusted for skewness)	8.830119
RECOMMENDATION		Mod-t UCL (Adjusted for skewness)	8.11522
Use 95% Chebyshev (Mean, Sd) UCL		Jackknife UCL	7.977829
		Standard Bootstrap UCL	7.999717
		Bootstrap-t UCL	9.806182
Therefore, the 95% UCL		Hall's Bootstrap UCL	17.77747
		Percentile Bootstrap UCL	8.210975
PASSES		BCA Bootstrap UCL	9.506765
		95% Chebyshev (Mean, Sd) UCL	11.96819
when compared to the cleanup objective		97.5% Chebyshev (Mean, Sd) UCL	14.76109
of 55 pCi/g		99% Chebyshev (Mean, Sd) UCL	20.24719

EXHIBIT 4

A108/146

95% UCL for Th-230 at SU5

Data File		Variable:	0.79
Raw Statistics		Normal Distribution Test	
Number of Valid Samples	46	Shapiro-Wilk Test Statisitic	0.596106
Number of Unique Samples	40	Shapiro-Wilk 5% Critical Value	0.945
Minimum	0.3	Data not normal at 5% significance level	
Maximum	4.26		
Mean	1.031957	95% UCL (Assuming Normal Distribution)	
Median	0.955	Student's-t UCL	1.171767
Standard Deviation	0.564622		
Variance	0.318798	Gamma Distribution Test	
Coefficient of Variation	0.547138	A-D Test Statistic	2.301824
Skewness	4.374498	A-D 5% Critical Value	0.752329
		K-S Test Statistic	0.175713
Gamma Statistics		K-S 5% Critical Value	0.130761
k hat	6.040866	Data do not follow gamma distribution	
k star (bias corrected)	5.66139	at 5% significance level	
Theta hat	0.170829		
Theta star	0.18228	95% UCLs (Assuming Gamma Distribution)	
nu hat	555.7597	Approximate Gamma UCL	1.146259
nu star	520.8478	Adjusted Gamma UCL	1.150155
Approx.Chi Square Value (.05)	468.91		
Adjusted Level of Significance	0.044783	Lognormal Distribution Test	
Adjusted Chi Square Value	467.3215	Shapiro-Wilk Test Statisitic	0.888274
		Shapiro-Wilk 5% Critical Value	0.945
Log-transformed Statistics		Data not lognormal at 5% significance level	
Minimum of log data	-1.20397		
Maximum of log data	1.449269	95% UCLs (Assuming Lognormal Distribution)	
Mean of log data	-0.05359	95% H-UCL	1.136671
Standard Deviation of log data	0.389942	95% Chebyshev (MVUE) UCL	1.284574
Variance of log data	0.152055	97.5% Chebyshev (MVUE) UCL	1.398674
		99% Chebyshev (MVUE) UCL	1.622801
		95% Non-parametric UCLs	
Data are Non-parametric (0.05)		CLT UCL	1.168889
RECOMMENDATION		Adj-CLT UCL (Adjusted for skewness)	1.226262
Use Student's-t UCL or Modified-t UCL		Mod-t UCL (Adjusted for skewness)	1.180716
		Jackknife UCL	1.171767
		Standard Bootstrap UCL	1.169345
Therefore, the 95% UCL		Bootstrap-t UCL	1.29138
		Hall's Bootstrap UCL	1.833411
PASSES		Percentile Bootstrap UCL	1.184783
		BCA Bootstrap UCL	1.232609
when compared to the cleanup objective		95% Chebyshev (Mean, Sd) UCL	1.394831
of 2.8 pCi/g		97.5% Chebyshev (Mean, Sd) UCL	1.551846
		99% Chebyshev (Mean, Sd) UCL	1.860274

EXHIBIT 4

A109/146

Science Applications International Corp

Client Sample ID: SU159-296S

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F6D270265-012
Work Order: H38ET
Matrix: SOLID

Date Collected: 04/25/06 1500
Date Received: 04/27/06 1045

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Iso THORIUM (LONG CT) DOE A-01-R MOD			pCi/g		Batch # 6123196		Yld % 94
Thorium 228	1.21		0.28	0.20	0.07	05/03/06	05/07/06
Thorium 230	1.19		0.28	0.20	0.04	05/03/06	05/07/06
Thorium 232	1.24		0.29	0.20	0.03	05/03/06	05/07/06

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

Science Applications International Corp

Client Sample ID: SU159-296N

Severn Trent Laboratories - Radiochemistry

Lab Sample ID: F6D270265-013
Work Order: H38E2
Matrix: SOLID

Date Collected: 04/25/06 1500
Date Received: 04/27/06 1045

Parameter	Result	Qual	Total Uncert. (2 σ+/-)	RL	MDC	Prep Date	Analysis Date
Iso THORIUM (LONG CT) DOE A-01-R MOD			pCi/g		Batch # 6123196		Yld % 88
Thorium 228	0.72		0.21	0.20	0.09	05/03/06	05/07/06
Thorium 230	2.69		0.53	0.20	0.07	05/03/06	05/07/06
Thorium 232	0.61		0.19	0.20	0.03	05/03/06	05/07/06

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.
Bold results are greater than the MDC

A111/146

STD VSAP BACKFILL INFO

This information will be represented in the Data Report.

For: UGL VII SU 6 (shelf) PRS 159

Checklist:

(per Section 5.6 of Std VSAP, Final, Aug 04)

☑ final Graphic EXHIBIT 1

(show sample locations & note any >CO and/or >HS)

2 locations > average surface release criteria & below HS (300 dpm/100 cm²)

☑ COC sample results Pu 238

(show DLs, HS, COs, and COC std deviation(s)) EXHIBIT 2

includes resurvey results for corner of shelf (06-ER-302)

NA recalc of N & retro curve

→ for direct/swipe data.

☑ preliminary data were reviewed

(Data Review & Validation Report ~~will be submitted with the Data Report~~) is not required for this type of data.

☑ Sign test & 95%UCL (per SU) EXHIBIT 3

(not required if all results <CO, see pg 19/21 of VSAP)

→ results PASS sign test & UCL comparison.

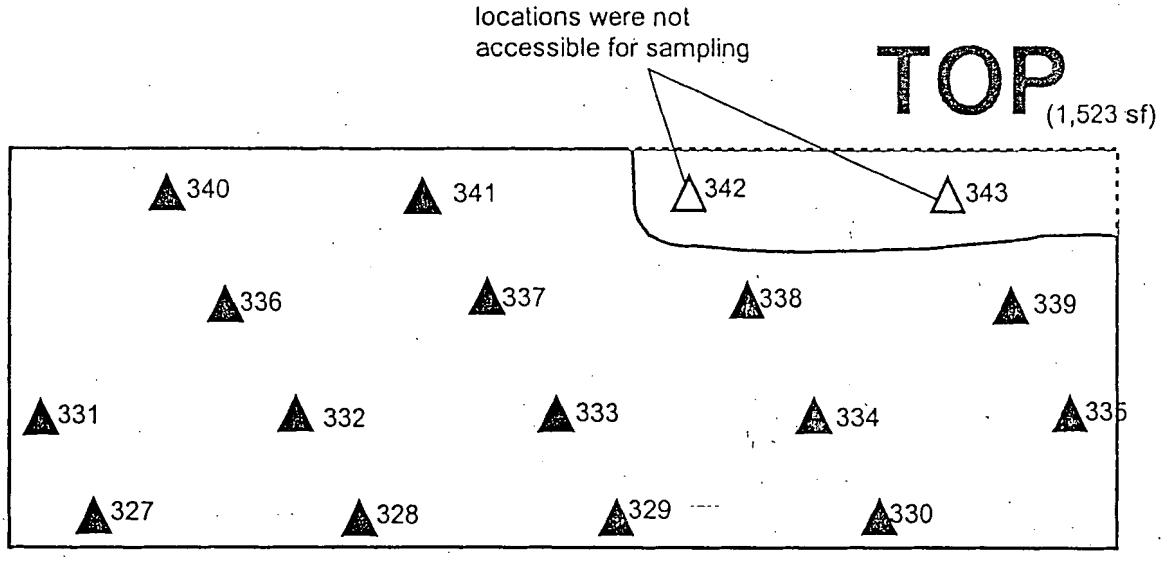
NA backfill is planned to begin on NA

From: (sign/date) 2 May 06

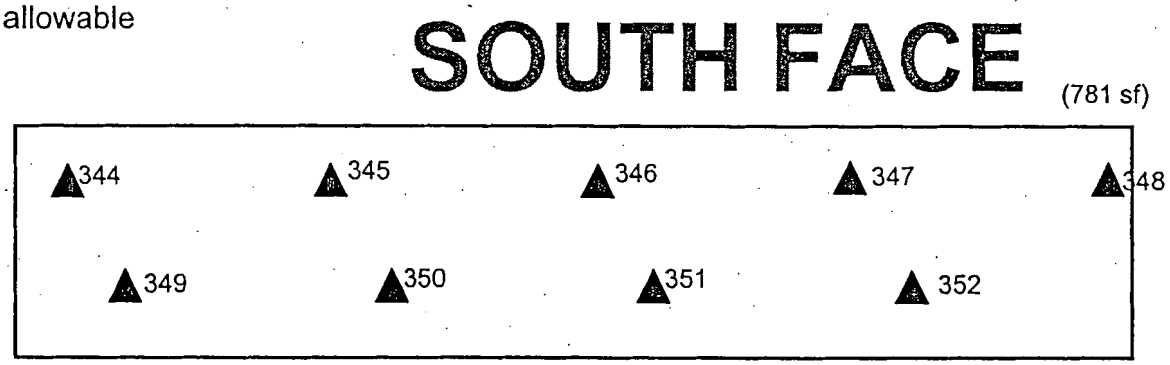
A1/2/146

PRS 159 SU6 (Shelf) Verification Locations

Note: all exposed surfaces are shown below.

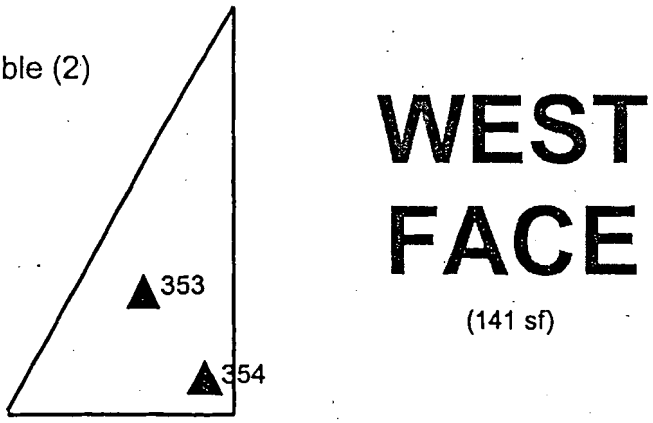


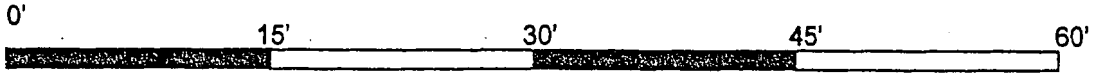
Note: all locations less than maximum allowable



NOTE: all sample IDs begin with SU6-159-

▲direct/swipe locations (26)
△verification locations not accessible (2)





A113146

EXHIBIT 1

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM)	SURVEY NO.
WD North East Concrete slab 546	06-ER-301
PURPOSE:	RWP NO.
	N/A
Survey locations indicated on attached map	DATE: 4/19/06
	TIME: 1300 hrs

MAP / DRAWING

Direct and Removable Alpha survey at locations specified on attached map

LEGEND:

- # = mrem/hr (γ) whole body
- #E = mrem/hr (β+η+γ) extremity on contact
- K = factor of 1000
- —·—·—·· = radiological boundary

- △ # - mrem/hr neutron
- ○ # - swipe number
- □ # - air sample number
- ○ #/α or /β - direct contamination measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
2360	5704/5714	11/21/06
3030	5822	7-19-06
3030	5819	5-31-06
—	N/A	—

[redacted]	HP# 5520	Date: 4-20-06
	HP# 5520	Date: 4-19-06
	HP# 5416	Date: 4-20-06

ML-9620 (2-98)

COPY

A114/146

EXHIBIT 2

Survey No.
06-ER- 301

RIM

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination			
Swipes (dpm/100cm^2)			
Sample #	Alpha	β/γ	Comments
1	0	0	327
2	0	0	328
3	0	0	329
4	0	0	330
5	0	0	331
6	0	0	332
7	4	0	333
8	0	0	334
9	0	0	335
10	0	0	336
11	0	12	337
12	0	32	338
13	0	0	339
14	0	0	340
15	0	0	341
16	0	0	344
17	0	16	345
18	0	30	346
19	0	28	347
20	0	28	348
21	0	18	349
22	0	24	350
23	0	12	351
24	0	0	352
25	0	0	353
26	0	0	354
27			
28			
29			
30			
31			
32		N/A	
33			
34			
35			

Removable Contamination			
Swipes (dpm/100cm^2)			
Sample #	Alpha	β/γ	Comments
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54		N/A	
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			

COMMENTS: N/A

COPY

NOTES:

1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO Count Room analysis for β/γ, alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of result are attached, write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If not needed, mark N/A.

ML-9620A (4-98)

EXHIBIT 2
A115/146

Survey No.
06-ER-301

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Ludlum 2360 Integrated Measurement Results							
		Alpha			Beta		
		BKGD	1	cpm	BKGD	128	cpm
		DL	1.4	Net cpm	DL	20	Net cpm
No.	Item/Location Description	Gross (cpm)	CF	Results (dpm/100cm2 or Sample)	Gross (cpm)	CF	Results (dpm/100cm2 or Sample)
1	327	15	8	112			<DL
2	328	7	8	48			
3	329	6	8	40			
4	330	8	8	56			
5	331	6	8	40			
6	332	7	8	48			
7	333	8	8	56			
8	334	11	8	80			
9	335	5	8	32			
10	336	5	8	32			
11	337	9	8	64			N/A
12	338	10	8	72			ALPHA
13	339	4	8	24			ONLY
14	340	11	8	80			
15	341	1	8	<DL			
16	344	3	8	16			
17	345	5	8	32			
18	346	12	8	88			
19	347	5	8	32			
20	348	3	8	16			
21	349	5	8	32			
22	350	14	8	104			
23	351	3	8	16			
24	352	6	8	40			
25	353	4	8	24			
26	354	4	8	24			
	N/A						

ML-9620C

Boxed values require sign test and 95% UCL to verify Release criteria is met.
Mark Spinney 5/3/06

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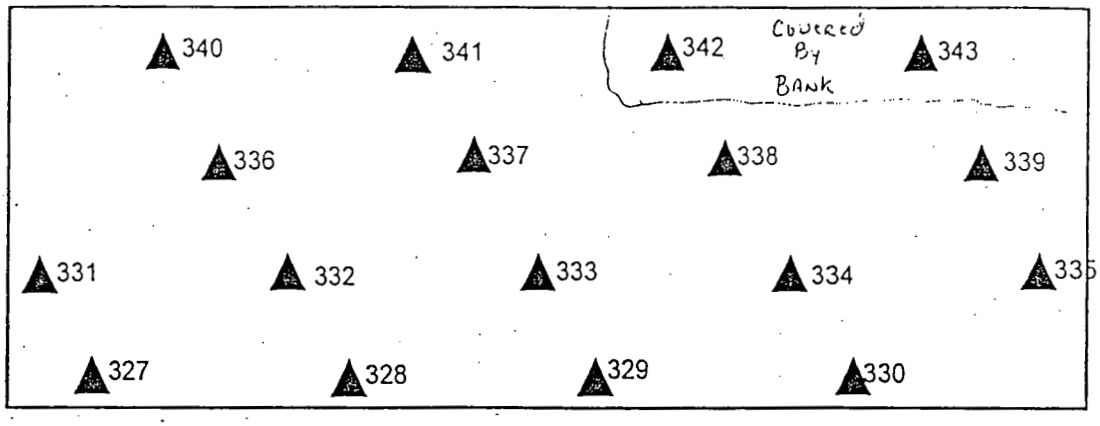
EXHIBIT 2
A 115a/146

p 4 of 4
RIM

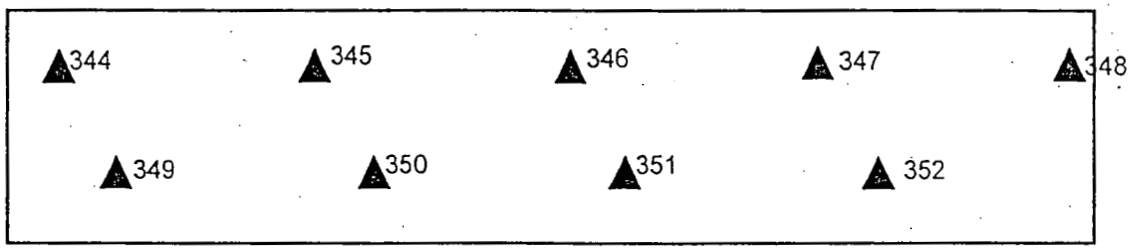
PRS 159 SU6 (Shelf) Verification Locations

Note: all exposed surfaces are shown below.

TOP (1,523 sf)

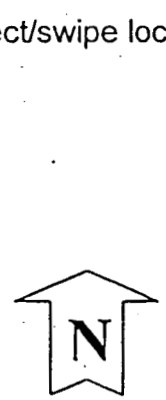


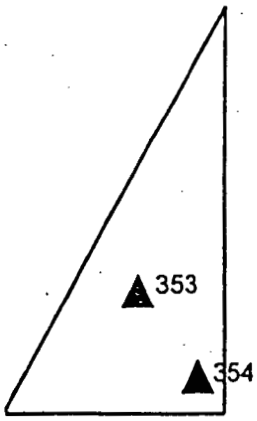
SOUTH FACE (781 sf)



NOTE: all sample IDs begin with SU6-159-

▲direct/swipe locations (28)





WEST FACE

(141 sf)

COPY

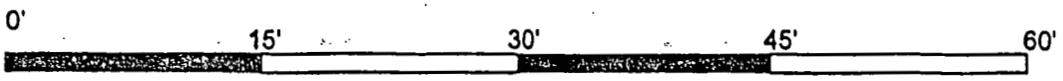


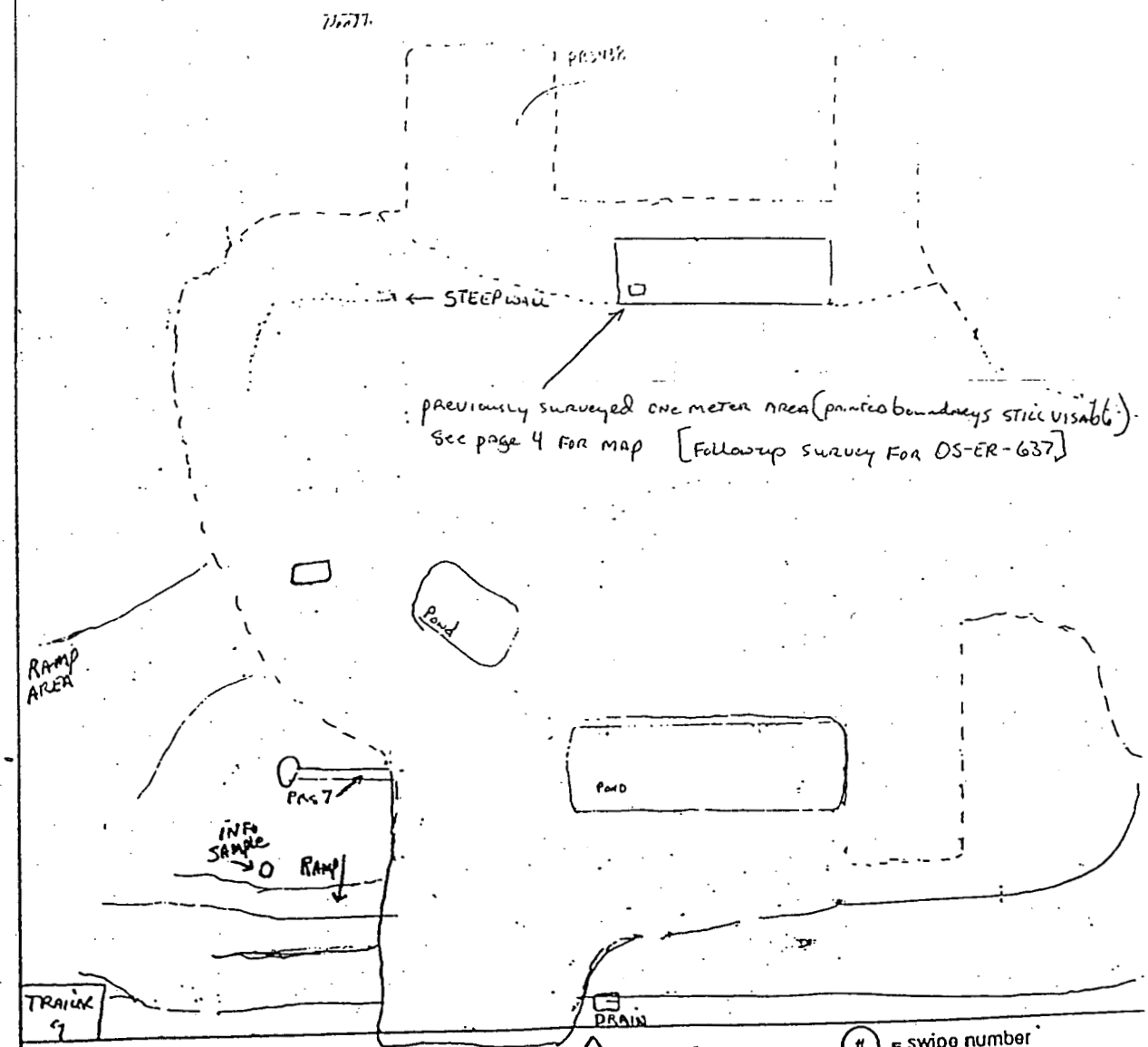
EXHIBIT 2
A116/146

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) WD PRS 154	SURVEY NO. 06-ER-302
PURPOSE: Follow-up survey of 1 meter square grid	MAP NO. N/A
	DATE 4-19-06
	TIME 1430 hrs

THE FIBER IS USED AS AN INDICATOR ONLY

MAP/DRAWING



LEGEND:
= mrem/hr (γ) whole body
E = mrem/hr (β+η+γ) extremity on contact
= mrem/hr neutron
= air sample number
= swipe number
#γ or /β = direct cont. measurement in dpm/100cm

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date		
2360	5704/5714	11-21-06	HP# 5520	Date: 4-20-06
3030	5822	7-19-06	HP# 5520	Date: 4-19-06
			[redacted] 5416	Date: 4-26-[redacted]
	N/A			

ML-0020 (2-98)

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EXHIBIT 2
A117/146

OC-ER-302

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination			
Swipes (dpm/100cm2)			
Sample#	β/γ	Alpha	Comments
1	0	0	Left Side
2	0	0	Right Side
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17	N/A		
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			

Removable Contamination			
Swipes (dpm/100cm2)			
Sample#	β/γ	Alpha	Comments
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52		N/A	
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			

COMMENTS: 3030 #	alpha	Bkg		Ct	DL	MDA
	Beta	Bkg	N/A	Ct	DL	MDA

NOTES:

1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO count Room analysis for β/γ ,alpha or tritium, leave column blank. Mark column N/A if not needed.. If count room printout of results are attached , write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If not needed, mark N/A.

ML-9620 (2/98)

COPY

EXHIBIT 2

A118/146

Survey No.
06-ER-302

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Ludlum 2360 Integrated Measurement Results							
		Alpha			Beta		
		BKGD	1	cpm	BKGD	0	cpm N/A alpha only
		DL	1.4	Net cpm	DL	20	Net cpm
No.	Item/Location Description	Gross (cpm)	CF	Results (dpm/100cm2 or Sample)	Gross (cpm)	CF	Results (dpm/100cm2 or Sample)
1	Lower Left	13	8	96			<DL RIM 4-26-06
2	Lower	7	8	48			
3	Lower	18	8	136			
4	Lower right	11	8	80			
5	Middle left	12	8	88			
6	Middle right	8	8	56			
7	Upper Left	10	8	72			
8	Upper	13	8	96			
9	Upper	11	8	80			
10	Upper Right	29	8	224			

N/A

All measurements are within 1 sq meter.
Maximum $DCGL_{EMC}$ = 224 dpm/100 cm²
Average $DCGL_W$ = 97.6 dpm/100 cm²

Therefore, area is below Allowable Total Residual Surface Contamination

Connie Kline
5-3-06

ML-9620C

COPY

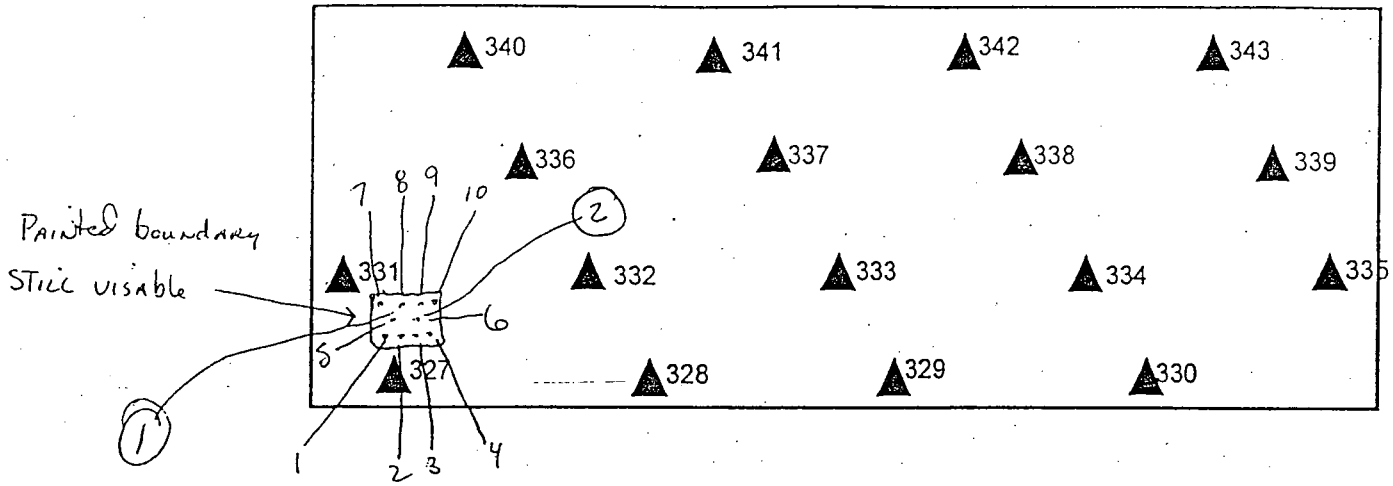
EXHIBIT 2
A119/146

06-ER-302
p 4 of 4
Rm

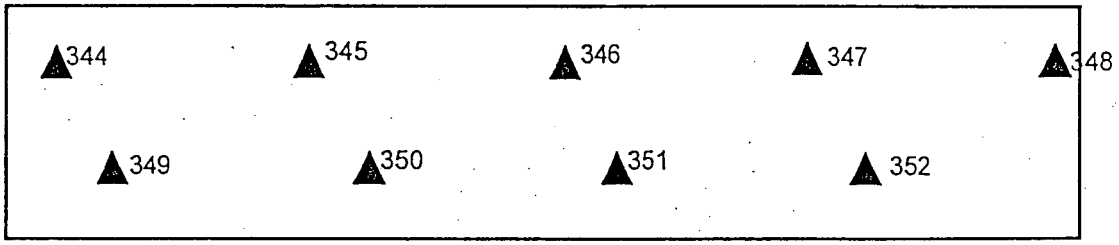
PRS 159 SU6 (Shelf) Verification Location

Note: all exposed surfaces are shown below.

TOP (1,523 sf)

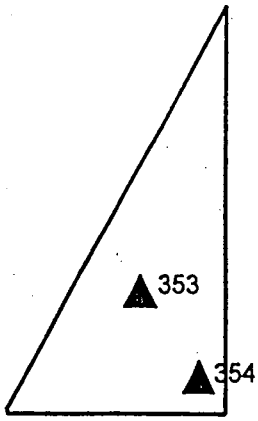


SOUTH FACE (781 sf)



NOTE: all sample IDs begin with SU6-159-

▲direct/swipe locations (28)



WEST FACE

(141 sf)

COPY

0' 15' 30' 45' 60'

EXHIBIT 2
A120/146

Sign Test for SU6 Data

Activity (dpm/100cm^2)

ID	Pu-238	CO-Meas	Sign Test
SU6-PRS159-327	**112.00**	**-12.000**	-
SU6-PRS159-328	48.00	52.000	+
SU6-PRS159-329	40.00	60.000	+
SU6-PRS159-330	56.00	44.000	+
SU6-PRS159-331	40.00	60.000	+
SU6-PRS159-332	48.00	52.000	+
SU6-PRS159-333	56.00	44.000	+
SU6-PRS159-334	80.00	20.000	+
SU6-PRS159-335	32.00	68.000	+
SU6-PRS159-336	32.00	68.000	+
SU6-PRS159-337	64.00	36.000	+
SU6-PRS159-338	72.00	28.000	+
SU6-PRS159-339	24.00	76.000	+
SU6-PRS159-340	80.00	20.000	+
SU6-PRS159-341	0.00	100.000	+
SU6-PRS159-344	16.00	84.000	+
SU6-PRS159-345	32.00	68.000	+
SU6-PRS159-346	88.00	12.000	+
SU6-PRS159-347	32.00	68.000	+
SU6-PRS159-348	16.00	84.000	+
SU6-PRS159-349	32.00	68.000	+
SU6-PRS159-350	**104.00**	**-4.000**	-
SU6-PRS159-351	16.00	84.000	+
SU6-PRS159-352	40.00	60.000	+
SU6-PRS159-353	24.00	76.000	+
SU6-PRS159-354	24.00	76.000	+

Average:	46.46
Std. Deviatior	28.53
Median:	40.00
Maximum:	112.00
Cleanup Obj.	100
Hot Spot:	300
N:	26
S+:	24
k Crit	18
P/F	**PASS**

EXHIBIT 3

A121/146

95% UCL for Pu-238 at SU6

Data File

Variable: 112

Raw Statistics	
Number of Valid Samples	26
Number of Unique Samples	13
Minimum	0
Maximum	112
Mean	46.46154
Median	40
Standard Deviation	28.53381
Variance	814.1785
Coefficient of Variation	0.614138
Skewness	0.760835

Normal Distribution Test	
Shapiro-Wilk Test Statisitic	0.935195
Shapiro-Wilk 5% Critical Value	0.92
Data are normal at 5% significance level	

95% UCL (Assuming Normal Distribution)	
Student's-t UCL	56.02019

Gamma Statistics Not Available

Lognormal Statistics Not Available

95% Non-parametric UCLs	
CLT UCL	55.66604
Adj-CLT UCL (Adjusted for skewness)	56.55823
Mod-t UCL (Adjusted for skewness)	56.15936
Jackknife UCL	56.02019
Standard Bootstrap UCL	55.58397
Bootstrap-t UCL	57.36555
Hall's Bootstrap UCL	56.70311
Percentile Bootstrap UCL	55.38462
BCA Bootstrap UCL	56.30769
95% Chebyshev (Mean, Sd) UCL	70.85368
97.5% Chebyshev (Mean, Sd) UCL	81.40818
99% Chebyshev (Mean, Sd) UCL	102.1404

Data are normal (0.05)

RECOMMENDATION

Use Student's-t UCL

Therefore, the 95% UCL

PASSES

when compared to the cleanup objective of 100 dpm/100cm2

EXHIBIT 3

A122/146

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APPENDIX E

DATA REVIEW & VALIDATION

DATA ASSESSMENT REPORT

DOE – Mound
PRS 159
Miamisburg, Ohio

Prepared for:

Terran Corporation
Project Manager: Chris Ruef

Prepared by:

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May 4, 2006

A125/146

1.0 Introduction

Analytical data can be evaluated on at least three quality control levels:

Data Review involves an assessment of the quality controls used by the laboratory during the performance of the analysis. These include such things as laboratory blanks, system monitoring compound (surrogate) recoveries, matrix spikes, etc. Which controls are assessed and what criteria are applied depend on the analysis performed. The results of field quality control measures such as field duplicates and trip blanks may also be evaluated. Data Review is normally performed on 100% of the analytical data.

Data Validation is a more detailed review of the entire laboratory data package. It includes all the elements of the Data Review plus verification of such checks as proper instrument calibration, proper use of standards and correct performance of data calculations. Data Validation is used to identify systemic problems with the way the laboratory performs and reports analyses.

Data Assessment may also evaluate whether project data quality objectives and other program needs that led to the collection of samples in the first place were met. Data assessment typically draws on the results of data validation of one or more data sets.

2.0 Description of the Data Set

This data assessment covers 343 samples collected February 3 or 8-15 and March 1, 7, or 28, 2006, from the Mound facility (PRS 159) to confirm environmental compliance prior to site closure. Offsite sample analyses were performed at Severn-Trent Laboratories of Earth City (St. Louis), MO, as analytical batches (LSDG) F6B270156, F6B270159, F6B270163, F6B170165, F6B270173, F6B270176, F6B270180, F6B280114, F6B280124, F6B280133, F6B280147, F6B280156, F6B280166, F6B280217, F6B280240, F6C070271, F6C070275, F6C070283, F6C090162 and F6C300210 (part). Samples included 311 unique solid samples, 16 field duplicate pairs, and 16 aqueous (rinsate) samples. Thirteen field samples were designated as matrix spike samples for analytical QC purposes. This is slightly below the appropriate 5% level of QC sampling for the MS/MSD samples, but an acceptable frequency for the rinsate and field duplicate checks. No data were qualified for this occurrence.

There were no problems associated with the documentation, shipment, or chain of custody of the samples. Detection limits were typical of method performance and met project needs.

Table 1 summarizes the identification of the samples and the analyses performed; the analytical methods performed were:

- Alpha spectroscopy for isotopic plutonium (Pu), thorium (Th), and uranium (U) by DOE Environmental Monitoring Lab (EML) Method A-01-R, Modified.
- Gamma spectroscopy for Cesium-137 (Cs-137) and other radionuclides by EML Method GA-01-R, Modified.

3.0 Data Review

The quality control data submitted with the analytical data packages were reviewed and assessed. The results of the assessment are presented in this section. The data qualification flags in Table 2 are used to indicate data quality problems identified during the data review process.

3.1 Tracer Recovery

The laboratory spikes every alpha spectrometry sample with a non-target isotope appropriate for that element. The percent recovery of this isotope is then used to scale the detected presence of the target isotopes. To fully meet QC criteria the isotope recovery must be between 20% and 115% and have an accumulated count of at least 200 counts. Tracer recovery in the samples typically met QC criteria, although in some cases recoveries were low and data required qualification as estimated was required. Low yields were found for thorium in F6B280124-003 (9%), F6B280217-010 (12%), and F6C090162-001 (12%), leading to data qualification of all thorium isotopes in these samples as estimated.

3.2 Blanks

The laboratory analyzes one blank for every 20 samples or LSDG. Laboratory blanks are analyzed to determine if laboratory processes are contributing to the detected sample activities. Laboratory blanks were analyzed at an appropriate frequency.

The laboratory method blanks associated with the verification samples were free of contamination by target isotopes except for Th-230, which was found at trace levels in virtually all method blanks. This contamination led to this isotope being qualified as nondetect in several rinsate samples, but none of the solid field samples.

3.3 Laboratory Duplicate

A laboratory duplicate analysis is performed to assess the precision and accuracy of the laboratory analysis. At least one duplicate is performed for every 20 samples or LSDG. The laboratory typically analyzed field samples in duplicate, but at times relied upon MS/MSD or LCS/LCSD samples in order to evaluate precision in an LSDG. No data were qualified for these occurrences.

To meet QC criteria the relative error ratio (RER) of duplicate samples must be < 3.0, or if one or both results are nondetect.

$$RER = \frac{[\text{Sample Result} - \text{Duplicate Result}]}{[TPU^2_{sample} + TPU^2_{dup}]^{1/2}}$$

TPU: total propagated uncertainty

It is known that for Mound soils contamination is usually distributed non-homogeneously even in dried and ground samples. Divergent results obtained from analysis of second portions from the same sample, if found, are a demonstration of this fact and not of the laboratory capability for precision. Agreement was considered acceptable if both results were nondetect, or if one was nondetect and the

other found at an estimated trace level. No exceedances of the relative error ratio limit for the laboratory duplicate analyses were identified.

3.4 Matrix Spike

A matrix spike (MS) analysis is performed to assess the precision and accuracy of the laboratory analysis. One matrix spike is to be performed for every 20 samples of a given matrix or at least once per LSDG. As noted earlier, this frequency was not quite achieved, primarily because no MS/MSD samples were included in the final LSDGs of this sampling event.

Matrix spike recoveries were typically within QC criteria for the target analytes, although exceptions were not uncommon for Th-230 (3 outliers) and Pu-238 (5 outliers) recoveries (both above and below acceptance limits), leading to qualification of these isotopes as estimated only in the sample spiked, not the entire LSDG, due to the well-documented matrix variability at the Mound facility.

MS/MSD analyses were not performed for gamma spectrometry, but no data were qualified for this occurrence.

3.5 Laboratory Control Sample

The Laboratory Control Sample (LCS) is a standard sample with a known quantity of the analyte of concern. The LCS recovery is an indication of whether the analytical process was in control during the analysis. The LCS recoveries were within QC requirements with the common exception of Pu-238 recovery above control limits in several aqueous LCS samples, which led to "UJ" qualification of this analyte in rinsate samples in the affected LSDGs. Th-230 outliers were also found twice (once high, once low) and single outliers for Cs-137 and Tl-208. Overall the LCS results demonstrated good analytical accuracy, and were analyzed at an acceptable frequency.

3.6 Equipment Rinsates

Equipment rinsates are used to ensure efficacy of equipment field decontamination procedures, and that the sample collection process is not causing cross contamination. Rinsate samples were free of measurable contamination, except for Th-230 at trace levels in most samples. Typically this had no effect on associated samples, but qualification of Th-230 in sample F6B280166-014 as estimated (J) resulted from rinsate contamination. Several rinsate blanks were qualified as nondetect for Th-230 due to contamination in the associated method (laboratory) blanks, which may have limited the impact of Th-230 data qualification for cross-contamination issues.

3.7 Field Duplicates

Field duplicates give an indication of the degree of homogeneity within the sample material. As with laboratory duplicates, they are reported as RER. Agreement between field duplicates was acceptable for all analyte pairs when reported as RER, although sporadic outliers of the data validation 35% RPD criterion were identified.

As noted under laboratory duplicates, it is known that for Mound soils contamination is usually distributed non-homogeneously even in dried and ground samples. If divergent results are obtained

from analysis of field duplicate pairs from the same sampling location, such an outlier would be a demonstration of this fact. Agreement was considered acceptable if both results were nondetect, or if one was nondetect and the other found at an estimated trace level. No exceedances of the relative error ratio limit for the field duplicate analyses were identified.

3.8 Other Issues

Because samples for Ra-226 analysis (gamma spectrometry) did not have a 21-day ingrowth period during analysis, the activity for Ra-226 (measured via the daughter isotope Bi-214) is an estimated value and may be biased low. As a result, all detected Ra-226 data are qualified "J" as estimated and all nondetect results are qualified "UJ" as nondetect at an estimated (biased low) reporting limit. (Had the holding time of the rinsate samples been excessive, the long holding time may have permitted extensive outgassing of Radon 222 (Rn-222), an intermediate isotope in the formation of the measured isotope, Bi-214, in which case data would have been rejected for the three aqueous Ra-226 nondetects).

Consistent with standard laboratory practice, detected results that were found below the required reporting limit were qualified as estimated by the laboratory. These results have inherently poor precision, as they are close to the analytical detection limit. The qualifiers were retained during data validation, and pose no significant limitation to data usability.

Nondetect results where the uncertainty was greater than the absolute value of the result were present, and were qualified "UJ" (nondetect at an estimated reporting limit), as the sample count may be less than the background reading in such cases. These instances did not result in data rejection; the results may be used as estimated values.

4.0 Data Validation

The results of 10% of samples in each LSDG were fully data validated. In addition to the items discussed above, the following items were evaluated:

1. Instrument calibration
2. Daily Source checks
3. Background and efficiency measurement
4. Proper frequency and use of blanks
5. All calculations

No additional qualification resulted from this assessment. There was no indication of a systemic deficiency.

5.0 Certification

Based upon this review the analytical data maybe used as presented with no further qualifications. 100% completeness for the analyses was obtained.

Table 1
Sampling Information

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
000909	F6B270156-001				
000910	F6B270156-002				
000911	F6B270156-003				
000912	F6B270156-004				MS/MSD
000914	F6B270156-005				
000915	F6B270156-006				
000916	F6B270156-007				
000918	F6B270156-008				
000919	F6B270156-009				
000920	F6B270156-010				
000922	F6B270156-011				
000924	F6B270156-012				
000925	F6B270156-013				*
000926	F6B270156-014				*
000927	F6B270156-015				*
000928	F6B270156-016				
000929	F6B270156-017				
000931	F6B270156-018				*
001061	F6B270156-019				For * Samples
000932	F6B270156-020				
000933	F6B270159-001				FDup 001045
001045	F6B270159-002				FDup 000933
000935	F6B270159-003				
000940	F6B270159-004				
000941	F6B270159-005				
000960	F6B270159-006				MS/MSD
000961	F6B270159-007				
000962	F6B270159-008				
000963	F6B270159-009				
000964	F6B270159-010				
000965	F6B270159-011				
000966	F6B270159-012				
000967	F6B270159-013				
000968	F6B270159-014				
000969	F6B270159-015				
000970	F6B270159-016				
000971	F6B270159-017				
000972	F6B270159-018				**
000973	F6B270159-019				
000974	F6B270159-020				
000975	F6B270163-001				**
001059	F6B270163-002				For ** Samples
000976	F6B270163-003				**
000977	F6B270163-004				**
000978	F6B270163-005				**
000979	F6B270163-006				
000980	F6B270163-007				MS/MSD
000981	F6B270163-008				
000982	F6B270163-009				
000983	F6B270163-010				FDup 001043

KEY:

MS/MSD	= The sample was also analyzed spiked for QC purposes.
FDup XXX	= The sample is a field duplicate of sample number XXX
	= Analysis not performed for that sample.
	= Sample is an aqueous (rinsate) sample.

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(Table continues next page)

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
001043	F6B270163-011				FDup 000983
000984	F6B270163-012				
000985	F6B270163-013				
000986	F6B270163-014				
000987	F6B270163-015				
000988	F6B270163-016				
000989	F6B270163-017				
000820	F6B270163-018				
000822	F6B270163-019				
000823	F6B270163-020				
000824	F6B270165-001				# FDup 001049
001049	F6B270165-002				# FDup 000824
000825	F6B270165-003				#
001065	F6B270165-004				For # Samples
000826	F6B270165-005				#
000827	F6B270165-006				#
000829	F6B270165-007				
000831	F6B270165-008				
000832	F6B270165-009				
000833	F6B270165-010				MS/MSD
000834	F6B270165-011				
000835	F6B270165-012				
000836	F6B270165-013				
000837	F6B270165-014				
000838	F6B270165-015				
000839	F6B270165-016				
000840	F6B270165-017				
000841	F6B270165-018				
000842	F6B270165-019				
000843	F6B270165-020				
000846	F6B270173-001				
000847	F6B270173-002				*
000848	F6B270173-003				*
000849	F6B270173-004				*
000850	F6B270173-005				*
000853	F6B270173-006				
000854	F6B270173-007				
000855	F6B270173-008				
000856	F6B270173-009				
000857	F6B270173-010				MS/MSD
000858	F6B270173-011				*
001064	F6B270173-012				For * Samples
000859	F6B270173-013				
000860	F6B270173-014				
000861	F6B270173-015				
000862	F6B270173-016				
000863	F6B270173-017				
000864	F6B270173-018				
000865	F6B270173-019				FDup 001054
001054	F6B270173-020				FDup 000865

KEY:

MS/MSD	= The sample was also analyzed spiked for QC purposes.
FDup XXX	= The sample is a field duplicate of sample number XXX
	= Analysis not performed for that sample.
	= Sample is an aqueous (rinsate) sample.

(Table continues next page)

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
000866	F6B270176-001				FDup 001048
001048	F6B270176-002				FDup 000866
000867	F6B270176-003				
000868	F6B270176-004				
000869	F6B270176-005				
000870	F6B270176-006				
000871	F6B270176-007				
001070	F6B270176-008				For 000871
000872	F6B270176-009				
000873	F6B270176-010				
000874	F6B270176-011				
000875	F6B270176-012				**
000876	F6B270176-013				
000877	F6B270176-014				MS/MSD
000878	F6B270176-015				
000879	F6B270176-016				
000880	F6B270176-017				
000881	F6B270176-018				
000882	F6B270176-019				**
000883	F6B270176-020				**
000884	F6B270180-001				**
000885	F6B270180-002				**
001063	F6B270180-003				For ** Samples
000886	F6B270180-004				
000887	F6B270180-005				
000888	F6B270180-006				
000889	F6B270180-007				
000890	F6B270180-008				
000891	F6B270180-009				
000892	F6B270180-010				FDup 001047
001047	F6B270180-011				FDup 000892
000893	F6B270180-012				
000894	F6B270180-013				
000895	F6B270180-014				
000896	F6B270180-015				
000897	F6B270180-016				MS/MSD
000898	F6B270180-017				
000899	F6B270180-018				
000900	F6B270180-019				
000901	F6B270180-020				
000902	F6B280114-001				#
001062	F6B280114-002				For # Samples
000903	F6B280114-003				#
000904	F6B280114-004				#
000905	F6B280114-005				#
000906	F6B280114-006				#
000907	F6B280114-007				
000908	F6B280114-008				FDup 001046
001046	F6B280114-009				FDup 000908
000990	F6B280114-010				

KEY:

MS/MSD = The sample was also analyzed spiked for QC purposes.
FDup XXX = The sample is a field duplicate of sample number XXX
= Analysis not performed for that sample.
= Sample is an aqueous (rinsate) sample.

(Table continues next page)

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
000991	F6B280114-011				
000992	F6B280114-012				
000993	F6B280114-013				
000994	F6B280114-014				FDup 001056
001056	F6B280114-015				FDup 000994
000995	F6B280114-016				
000996	F6B280114-017				
000997	F6B280114-018				
000998	F6B280114-019				MS/MSD
000999	F6B280114-020				
001000	F6B280124-001				*
001072	F6B280124-002				For * Samples
001001	F6B280124-003				*
001003	F6B280124-004				*
001004	F6B280124-005				*
001005	F6B280124-006				
001006	F6B280124-007				
001007	F6B280124-008				
001008	F6B280124-009				
001010	F6B280124-010				
001011	F6B280124-011				
001012	F6B280124-012				
001015	F6B280124-013				#
001016	F6B280124-014				# FDup 1058
001058	F6B280124-015				# FDuo 1016
001017	F6B280124-016				#
001019	F6B280124-017				
001020	F6B280124-018				
001021	F6B280124-019				
001022	F6B280124-020				
001023	F6B280133-001				MS/MSD
001024	F6B280133-002				
001025	F6B280133-003				
001026	F6B280133-004				FDup 001057
001057	F6B280133-005				FDup 001026
001027	F6B280133-006				
001029	F6B280133-007				**
001073	F6B280133-008				For ** Samples
001030	F6B280133-009				**
001031	F6B280133-010				**
001032	F6B280133-011				**
001033	F6B280133-012				
001034	F6B280133-013				#
001074	F6B280133-014				For # Samples
000736	F6B280133-015				
000737	F6B280133-016				
000738	F6B280133-017				
000739	F6B280133-018				
000740	F6B280133-019				
000741	F6B280133-020				$ (Next SDG)

KEY:

MS/MSD	= The sample was also analyzed spiked for QC purposes.
FDup XXX	= The sample is a field duplicate of sample number XXX
	= Analysis not performed for that sample.
	= Sample is an aqueous (rinsate) sample.

(Table continues next page)

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
000742	F6B280147-001				
000743	F6B280147-002				$
000744	F6B280147-003				$
000745	F6B280147-004				$ MS/MSD
000746	F6B280147-005				
000747	F6B280147-006				
000748	F6B280147-007				
000749	F6B280147-008				
000750	F6B280147-009				
000751	F6B280147-010				
000752	F6B280147-011				$
001068	F6B280147-012				For $ Samples
000753	F6B280147-013				
000754	F6B280147-014				
000755	F6B280147-015				
000756	F6B280147-016				
000757	F6B280147-017				
000758	F6B280147-018				
000760	F6B280147-019				*
000761	F6B280147-020				*
000763	F6B280156-001				
000764	F6B280156-002				
000765	F6B280156-003				
000766	F6B280156-004				
000767	F6B280156-005				MS/MSD
000768	F6B280156-006				
000769	F6B280156-007				FDup 001053
001053	F6B280156-008				FDup 000769
000770	F6B280156-009				*
001067	F6B280156-010				For * Samples
000771	F6B280156-011				*
000772	F6B280156-012				
000773	F6B280156-013				
000774	F6B280156-014				
000775	F6B280156-015				
000776	F6B280156-016				
000777	F6B280156-017				
000778	F6B280156-018				
000779	F6B280156-019				
000780	F6B280156-020				

KEY:

MS/MSD	= The sample was also analyzed spiked for QC purposes.
FDup XXX	= The sample is a field duplicate of sample number XXX
	= Analysis not performed for that sample.
	= Sample is an aqueous (rinsate) sample.

(Table continues next page)

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
000781	F6B280166-001				
000782	F6B280166-002				
000783	F6B280166-003				
000784	F6B280166-004				
000785	F6B280166-005				FDup 001051
001051	F6B280166-006				FDup 000785
000786	F6B280166-007				
000787	F6B280166-008				MS/MSD
000788	F6B280166-009				
000789	F6B280166-010				
000792	F6B280166-011				
000793	F6B280166-012				*
000794	F6B280166-013				#
000795	F6B280166-014				#
000796	F6B280166-015				#
000797	F6B280166-016				
000798	F6B280166-017				
000799	F6B280166-018				
000800	F6B280166-019				*
000801	F6B280166-020				#
000802	F6B280217-001				#
001066	F6B280217-002				For # Samples
000803	F6B280217-003				
000804	F6B280217-004				
000805	F6B280217-005				FDup 001050
001050	F6B280217-006				FDup 000805
000807	F6B280217-007				*
001069	F6B280217-008				For * Samples
000808	F6B280217-009				
000810	F6B280217-010				MS/MSD
000811	F6B280217-011				
000812	F6B280217-012				
000813	F6B280217-013				
000815	F6B280217-014				
001071	F6B280217-015				For 000815
000816	F6B280217-016				
000817	F6B280217-017				
000819	F6B280217-018				FDup 001055
001055	F6B280217-019				FDup 000819
001035	F6B280217-020				

KEY:

MS/MSD	= The sample was also analyzed spiked for QC purposes.
FDup XXX	= The sample is a field duplicate of sample number XXX
	= Analysis not performed for that sample.
	= Sample is an aqueous (rinsate) sample for 000422, -660, -661, -716, -717 and -719

(Table continues next page)

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
001036	F6B280240-001				
001037	F6B280240-002				
001038	F6B280240-003				FDup 1052
001052	F6B280240-004				FDup 1038
001039	F6B280240-005				
001040	F6B280240-006				
001041	F6B280240-007				
001042	F6B280240-008				
000759	F6C070271-001				
000762	F6C070271-002				
000806	F6C070271-003				
000809	F6C070271-004				
000814	F6C070271-005				
000818	F6C070271-006				
000821	F6C070271-007				
000828	F6C070271-008				
000830	F6C070271-009				
000851	F6C070271-010				
000938	F6C070271-011				
000939	F6C070271-012				
000942	F6C070271-013				
000943	F6C070271-014				
000944	F6C070271-015				
000945	F6C070271-016				
000946	F6C070271-017				
000947	F6C070271-018				*
000948	F6C070271-019				*
000949	F6C070271-020				*
000950	F6C070275-001				*
000951	F6C070275-002				
000952	F6C070275-003				
000953	F6C070275-004				
000954	F6C070275-005				*
001060	F6C070275-006				For * Samples
000955	F6C070275-007				
000956	F6C070275-008				
000957	F6C070275-009				
001044	F6C070275-010				
000958	F6C070275-011				
000959	F6C070275-012				
001002	F6C070275-013				
001009	F6C070275-014				
001013	F6C070275-015				
001014	F6C070275-016				
001138	F6C070275-017				
001139	F6C070275-018				
001140	F6C070275-019				
001141	F6C070275-020				

KEY:

MS/MSD	= The sample was also analyzed spiked for QC purposes.
FDup XXX	= The sample is a field duplicate of sample number XXX
	= Analysis not performed for that sample.
	= Sample is an aqueous (rinsate) sample.

(Table continues next page)

Table 1, Concluded
Sampling Information

Field Sample ID	Laboratory ID	Alpha Spectrometry	Gamma Spectrometry	Other	QC Check?
001142	F6C070283-001				
001144	F6C070283-003				
001145	F6C070283-004				
001147	F6C070283-005				
001148	F6C070283-006				
001149	F6C070283-007				
001146	F6C090162-001				
001153	F6C090162-002				
000921	F6C300210-006				
000934	F6C300210-007				
001159	F6C300210-008				
001160	F6C300210-009				
001161	F6C300210-010				
001162	F6C300210-011				

KEY:
MS/MSD = The sample was also analyzed spiked for QC purposes.
FDup of XXXXXX = The sample is a field duplicate of sample number XXXXXX
= Analysis not performed for that sample.

Table 2 - Data Review Qualifications

Flag	Description
J	Estimated sample result
U	Non-detect sample result
UJ	Non-detected sample result at an estimated reporting limit
R	Rejected (unusable) sample result

APPENDIX F

WALKOVER & HARD SURFACES (SU2) DOCUMENTATION

RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM) PRS 159	SURVEY NO. 06-ER-109
PURPOSE: PRS 159 Walk-over SUs 2-5 (RWS 30May6)	RWP NO. N/A
	DATE: 2-3-06
	TIME: 1300 hrs

The Bicron FIDLER or Sodium Iodine is used as an indicator only :

N/A = not applicable N/D = Non detectable

MAP/DRAWING

FIDLER Walk-over

This is a summary report of FIDLER readings taken during and following daily field excavation activities at PRS 159 and represents the accessible as-left surfaces prior to verification sampling for the areas shown on Figure 1 and includes the limits of verification. This report only applies to the areas indicated on the figure.

100% walkover of all accessible surfaces within verification limits and slopeback areas occurred as a matter of course throughout the excavation process. Walkovers entailed surveying in overlapping rows as per the VSAP FIDLER readings on all surfaces were at background levels for channel one and channel out.

Walkover surveys are indicators of the presence or absence of gross contamination only. However, certain correlations to specific isotopes and respective COs have been made based on testing described in [Recharacterization of pink soil in PRS 66 Dec 3, 2003,Final.]

COPY

LEGEND:

= mrem/hr (γ) whole body

E = mrem/hr (β+n+γ) extremity on contact

△# = mrem/hr neutron

[#] = air sample number

(#) = swipe number

(# /α) or /β = direct contamination measurement in dpm/100cm2

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
	N/A	

[redacted]

HP#	Date:
5520	2-3-06
HP#	Date:
HP# 7348	Date: 2/3/06

ML-9620 (2/98)

A139/146

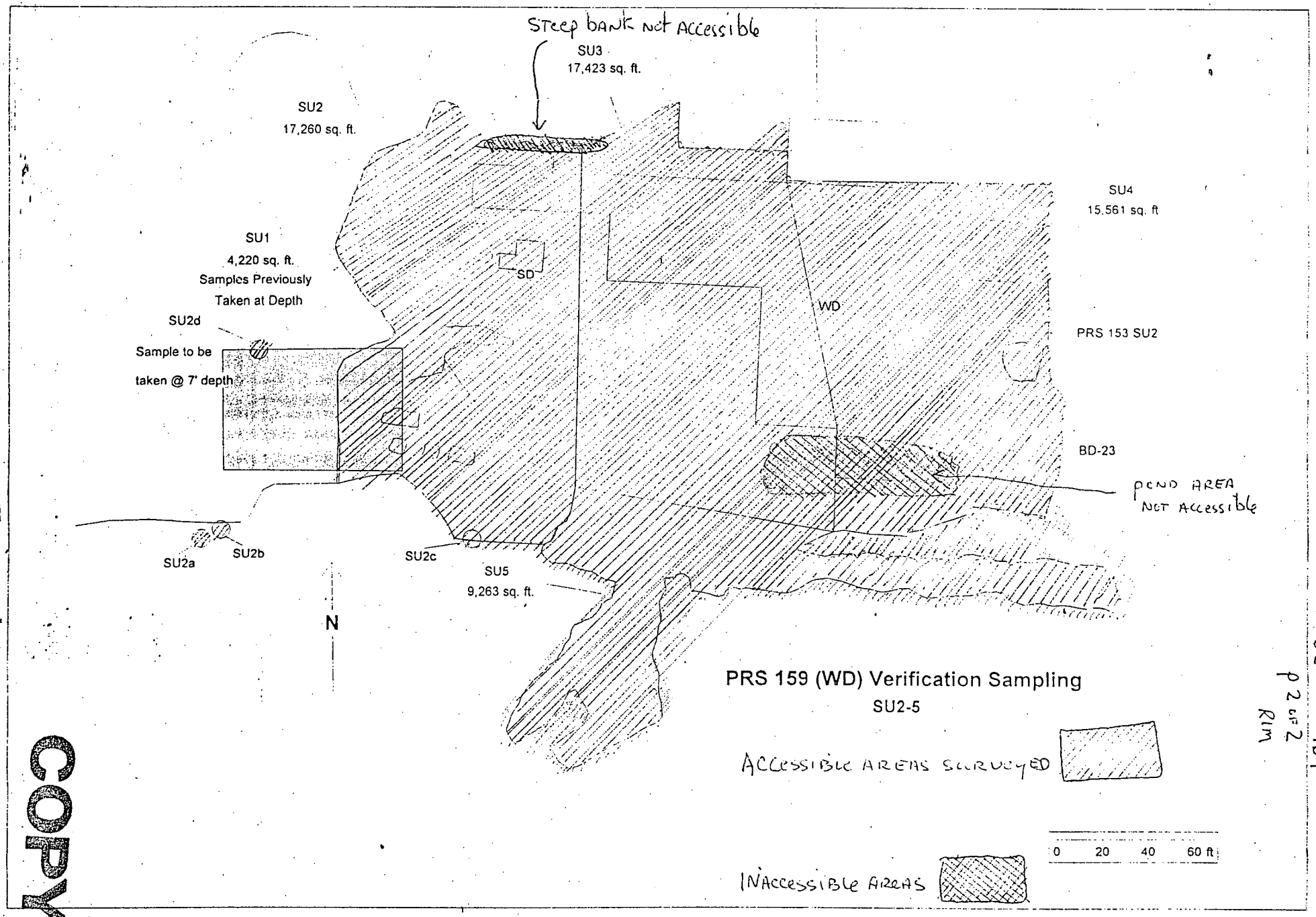

Figure 1

A140/146

COPY

06-ER-109
p 2 of 2
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RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG. / ROOM / AREA) PRS-159 Survey units	SURVEY NO. 06-ER-0253
PURPOSE: Survey of sample points on asphalt or concrete PRS-159	RWP NO. N/A
	DATE: 3-1-06
	TIME: 0830

MAP / DRAWING

#1 2360	BKGD	DL
α	1.8cpm	1.8cpm
B⁻	145.4cpm	20cpm
#2 2360	BKGD	DL
α	3.6cpm	2.6cpm
B⁻	270.4	20 cpm

Survey for hard surfaces @ locations:
SU2-16
SU 2-17
SU 2-18
SU 2-19

WWS 30 May 6

See attached map for locations

Location	Inst.	Alpha & Beta Intergrate count Result
1. PRS-159-SU2-016	#1	~~α 21.6 / B⁻ 1510~~ α < DL / B⁻ 754.4 3-20-06 Net DPM value
2. PRS-159-SU2-017	#2	α < DL / B⁻ 178.4
3. PRS-159-SU-2-018	#2	α < DL / B⁻ 294.4
4. PRS-159-SU-2-019	#1	~~α < DL / B⁻ 754.4~~ α < DL / B⁻ 1510 3-20-06

COPY

LEGEND:
= mrem/hr (γ) whole body
#E = mrem/hr (β+η+γ) extremity on contact
K = factor of 1000
— · — · — = radiological boundary
△# = mrem/hr neutron
= air sample number
(#) = swipe number
(#/α) = α or /β = direct contamination measurement in dpm/100 cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
#1 2360	5748/5736	1-25-07
#2 2360	5711/5721	8-16-06
3030	5743	12-8-06
3030	5902	2-20-07

[redacted]

HP# 7561 7544	Date: 3-20-06
HP# 7561	Date: 3-1-06
HP# 6178	Date: 3-21-06

Survey No.
06-E2-0253

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments
1	0	5	N/A	PRS-159-SW-2-0016
2	6	2		PRS-159-SW2-017
3	0	2		PRS-159-SW2-018
4	0	0		PRS-159-SW2-019

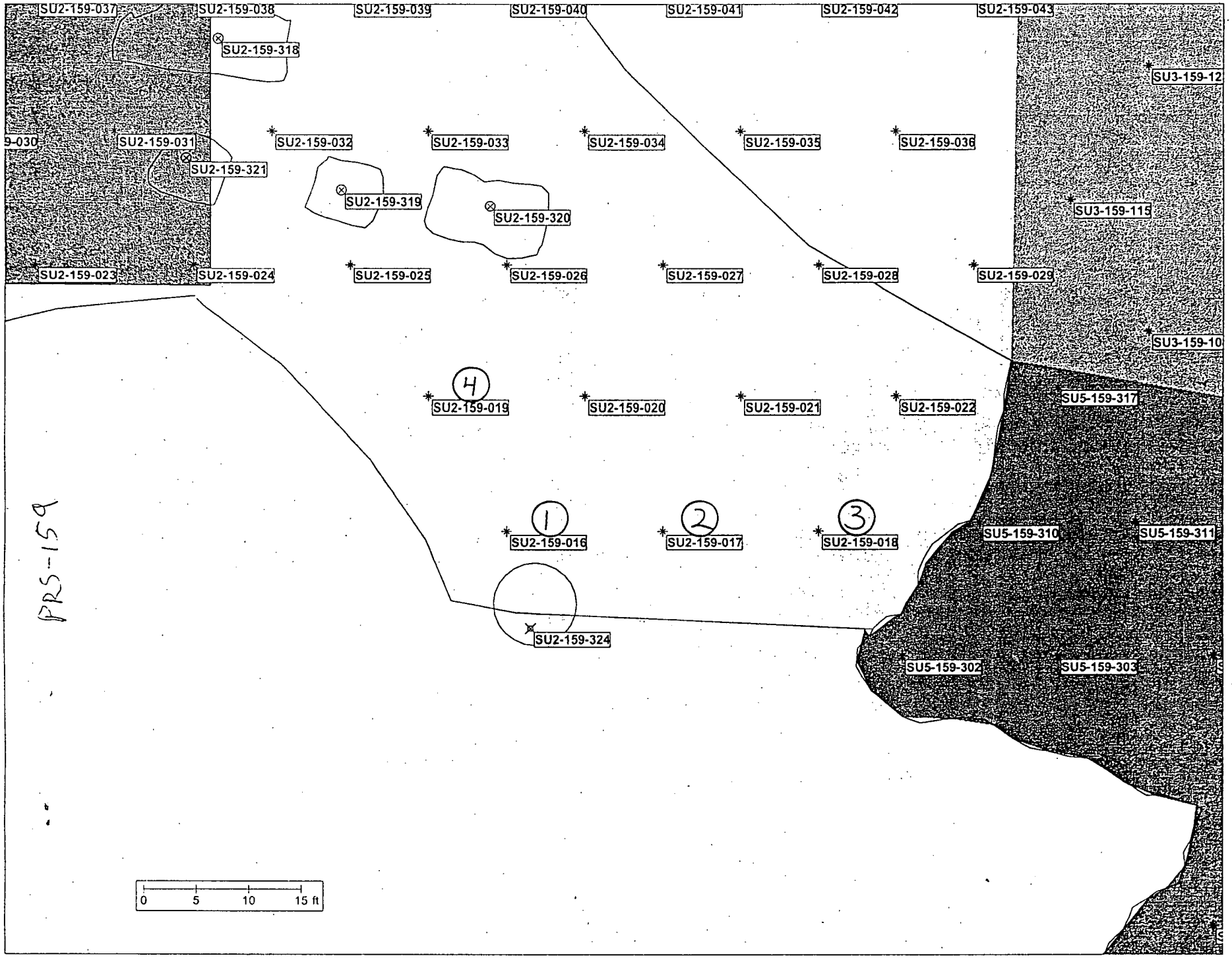
Removable Contamination				
Swipes (dpm/100cm²)				
Sample #	β/γ	Alpha	Tritium	Comments

COMMENTS:

NOTES:
1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO Count Room analysis for β/γ, alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of results are attached, write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If needed, mark N/A.

COPY

ML-9620A (4-98)



RSDS 06-ER-0253

3 of 3

PRS-159

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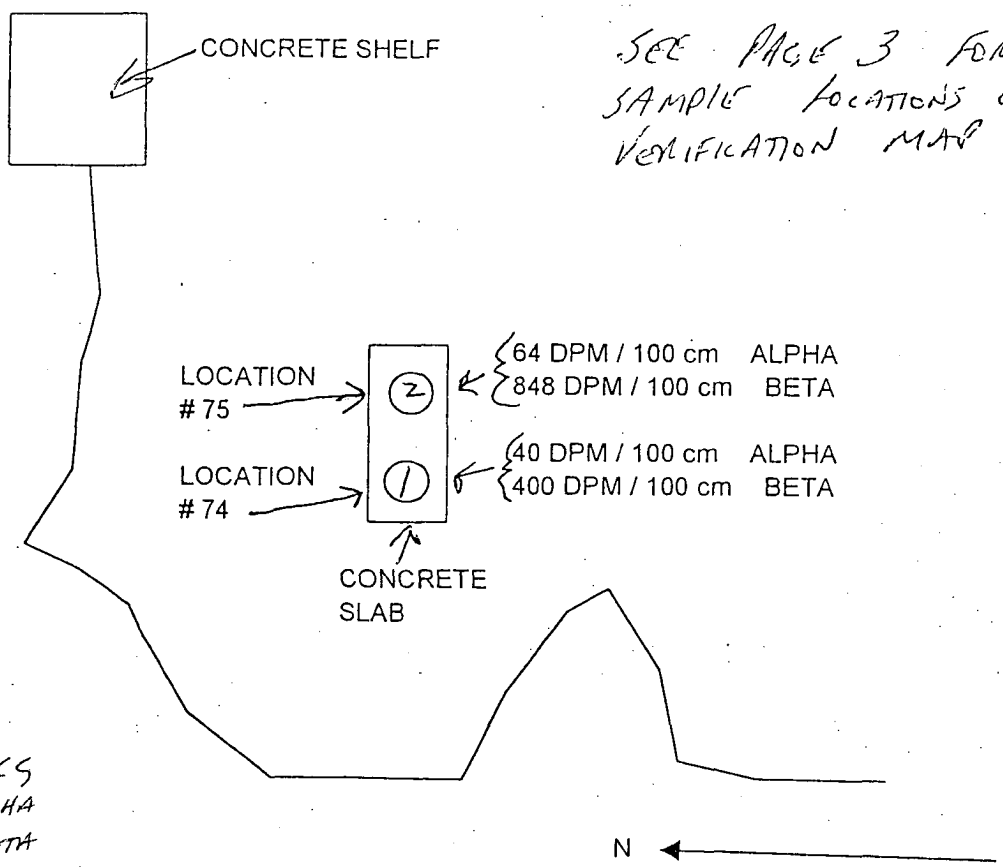
RADIOLOGICAL SURVEY DATA SHEET

LOCATION: (BLDG./AREA/ROOM)	SURVEY NO.
PRS 159	06-WM-0303
PURPOSE:	RWP NO.
DIRECT AND REMOVABLE CONTAMINATION SURVEY OF CONCRETE SLAB OF SAMPLE LOCATIONS # 74 AND # 75	NA
	DATE: 05/04/2006
	TIME: 14:30

MAP / DRAWING



SEE PAGE 3 FOR SAMPLE LOCATIONS ON VERIFICATION MAP

2360 BKG
2cpm ALPHA
199 cpm BETA
2360 DL
1.8 cpm ALPHA
20 cpm BETA

LEGEND:
- # = mrem/hr (γ) whole body
- #E = mrem/hr (β+η+γ) extremity on contact
- K = factor of 1000
- —·—·—·· = radiological boundary
- # - mrem/hr neutron
- # - swipe number
- # - air sample number
- #/α or /β - direct contamination measurement in dpm/100cm²

INSTRUMENTS USED

Instrument	Serial Number	Cal. Due Date
2360 / 43-89	5755 / 5723	01/10/2007
3030	5822	07/19/2006
	A	
	N	

[redacted]

HP#	Date:
6012 / 5520	5/4/06
[redacted]	
HP# 6012	Date: 5-4/06
[redacted]	
5416	Date: 5-4-06
[redacted]	

ML-9620 (2-98)

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Survey No. 06-LR-0303

RADIOLOGICAL SURVEY DATA SHEET (cont.)

Removable Contamination			
Swipes (dpm/100cm^2)			
Sample #	Alpha	β/γ	Comments
1	Ø	16	LOCATION #74
2	Ø	19	LOCATION #75
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			

Removable Contamination			
Swipes (dpm/100cm^2)			
Sample #	Alpha	β/γ	Comments
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			

NA

COMMENTS: NONE

NOTES:

1. See MD-80036 10002 for calculations of WB, extremity and skin dose rates.
2. To request RO Count Room analysis for β/γ, alpha or tritium, leave column blank. Mark column N/A if not needed. If count room printout of result are attached, write "see attached" in column.
3. Annotate special sample type (e.g., soil, water), special identifiers or otherwise in Comments. If not needed, mark N/A

ML-9620A (4-98)

COPY

A145/146

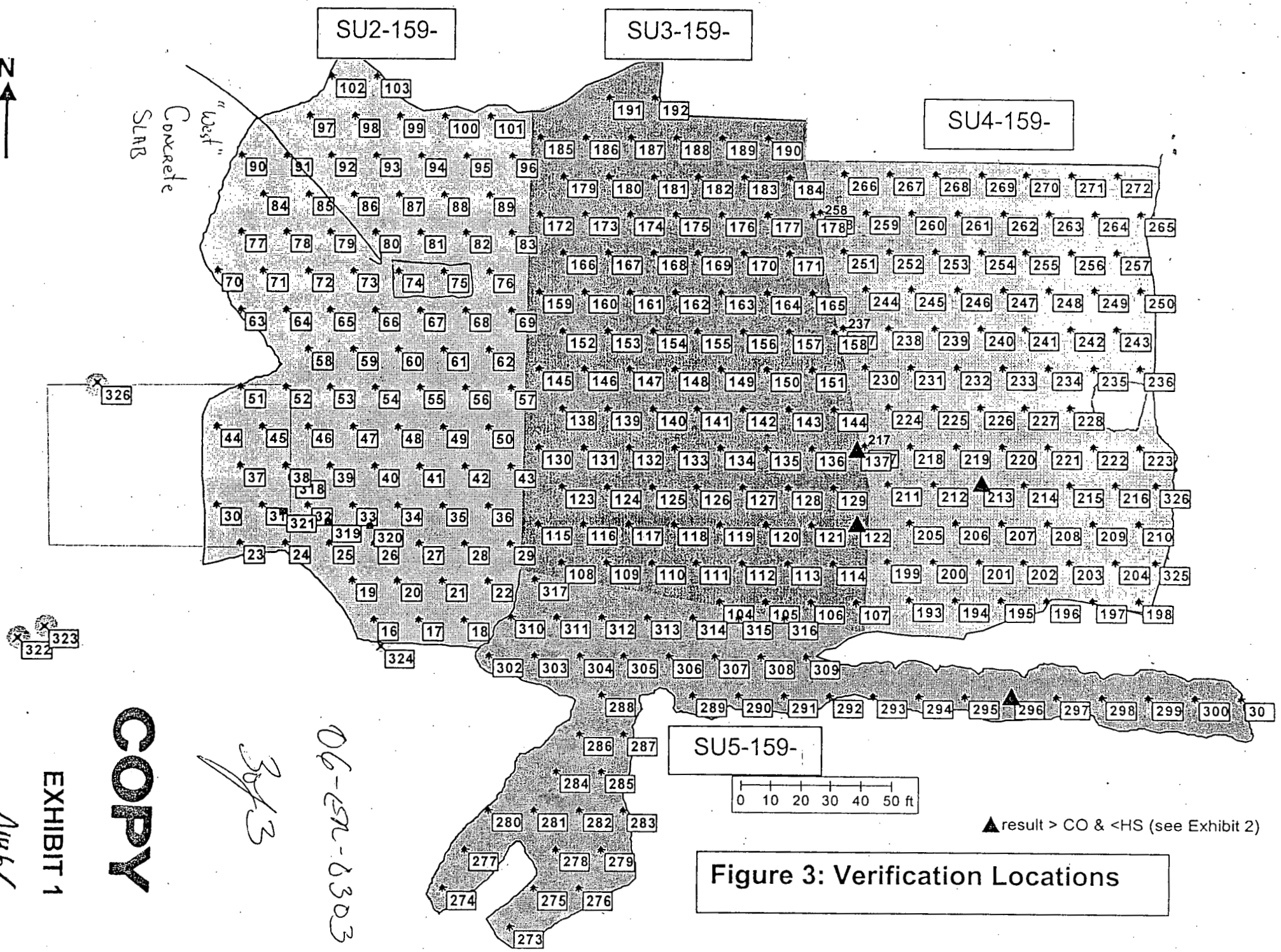

Figure 3: Verification Locations

COPY

EXHIBIT 1

06-ER-0303

Aug 9/06

ATTACHMENT B

DATA REPORT
PRS 159 (SU1) SD BEDS

DATA REPORT

PRS 159 (SU1) SD Beds

March 2006

Rev. 0

Final

Department of Energy

Miamisburg Closure Project

CH2MHILL

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2.0	DOCUMENT ORGANIZATION / SUMMARY	1
3.0	FIELD ACTIVITIES	1
4.0	DATA REVIEW / VALIDATION	2

Figures

Figure 1: Location of SD Beds

Figure 2: Verification Locations

Tables

Table 1: Verification Results

Table 2: 95% UCL Calculation for SU1 – Pu-238

Table 3: Standard Deviation Calculations

Table 4: MARSSIM Spreadsheet

Table 5: Sign Test

Table 6: Retro Power Curve

Appendices

Appendix A Figures

Appendix B Tables

Appendix C Post-Ex SUD Excerpt

Appendix D Backfill Package

Appendix E Data Review & Validation

B2/30

Acronyms

Ex	Excavation
pCi/g	picoCuries per gram
PRS	Potential Release Site
QC	quality control
RA	removal action
R&V	review and validation
SUD	Survey Unit Design
UCL	upper confidence limit
UGL	underground line
VSAP	Verification Sampling and Analysis Plan

1.0 PURPOSE

This Data Report provides documentation of sampling activities conducted in accordance with the Standard VSAP, Soils Verification Sampling & Analysis Plan [VSAP], Final, August 2004 and the Post-Excavation (Ex) Survey Unit Design (SUD); required to close out the SD Beds (part of Potential Release Site (PRS) 159). The location of the SD Beds area is shown on Figure 1.

The purposes of this Data Report are to:

- document any variances to the VSAP/Post-Ex SUD,
- present statistical and bias data (separately),
- present summary statistics and statistical analyses of the applicable data, including retrospective power curve, and
- provide documentation of data review and validation.

2.0 DOCUMENT ORGANIZATION / SUMMARY

This Data Report is for SU1 of the PRS 159, 155-158, & WD Footprint Post-Ex SUD. This SU covers the part of PRS 159 known as the SD Beds. A separate Data Report will be prepared to document verification of the remaining SUs (SUs 2-5) associated with PRS 159.

Unless otherwise specified as a variance, sampling and analyses were conducted in accordance with the VSAP and Post-Ex SUD. An excerpt of the Post-Ex SUD is presented in Appendix C.

3.0 FIELD ACTIVITIES

Verification sampling activities occurred on October 11 through 13, 2005. The purpose of the sampling was to verify the previously excavated SD Bed surface. Since the previous excavation was backfilled, at-depth sampling was required. The investigation was conducted in accordance with the VSAP.

All samples were collected from soil borings in accordance with the procedures presented in the Mound Methods Compendiums S-001, S-002, S-003, S-020, S-026, S-028, S-029 and Q-002. Samples were collected using corers with acetate liners from

the fill/till interface. The samples from the uppermost portion of the till layer (as identified by a geologist) were composited in stainless steel bowls using stainless steel trowels and placed in ½ liter plastic containers with lids. All equipment was thoroughly decontaminated using non-phosphate detergent and distilled water between sample locations. The samples were field-screened by a radiological control technician at the site and screened by the Mound Soil Screening Laboratory prior to shipment to the contract laboratory.

Results are presented in Table 1. Statistical analyses are presented in Tables 2 through 6 to document that the one result above cleanup objective and below hot spot criteria was acceptable.

Since excavation was not required, a backfill package is not presented in Appendix D.

4.0 DATA REVIEW / VALIDATION

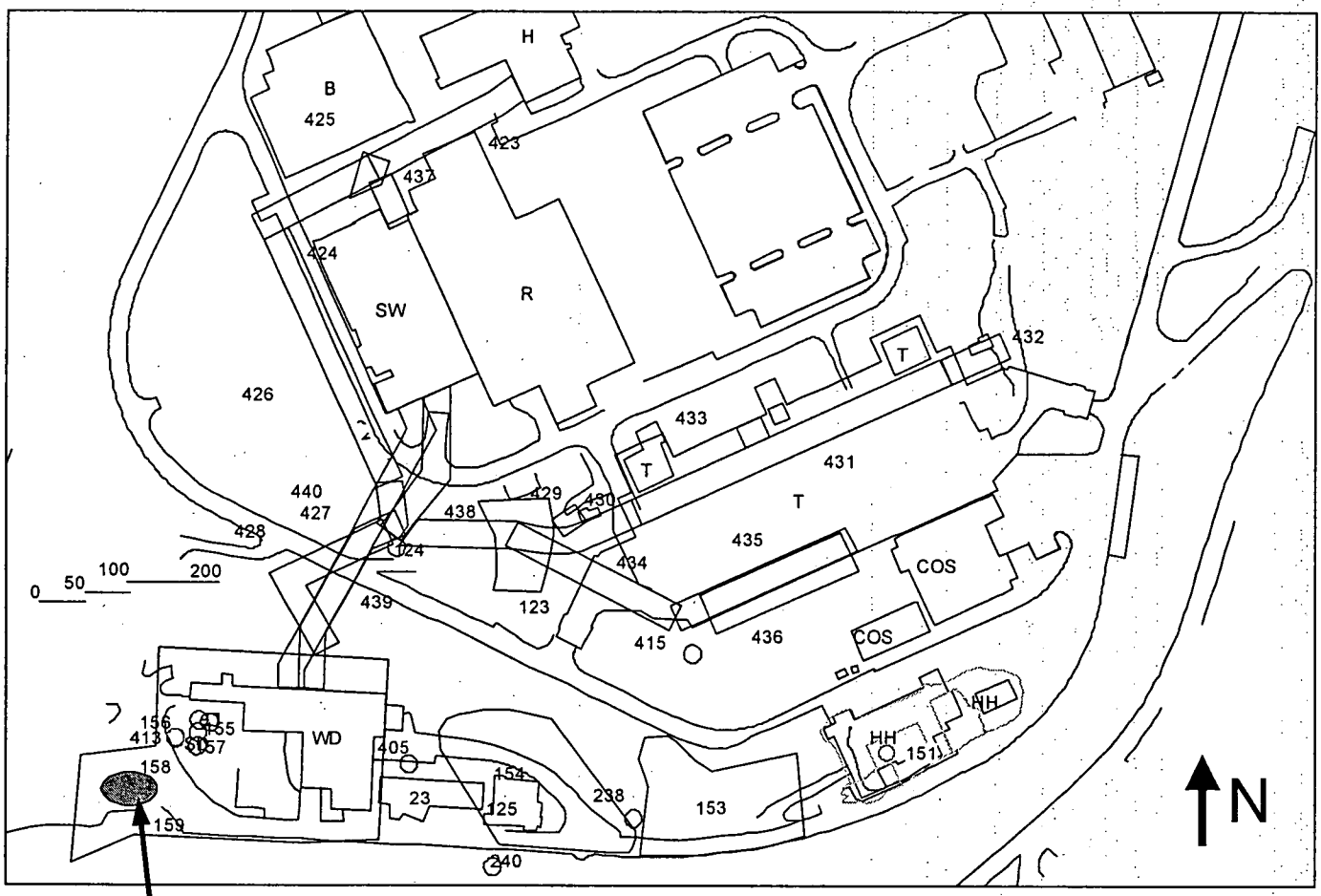
All data were reviewed and 10% of offsite data were validated.

Field and laboratory QC (quality control) were assessed as part of the data review and validation (R&V) process.

Documentation of review and validation (and related variances) is provided in Appendix E. Review and validation supports that the data are usable.

APPENDIX A

FIGURES



SD Beds

Figure 1: Location of SD Beds

Note: sample depths are presented in Table 1.

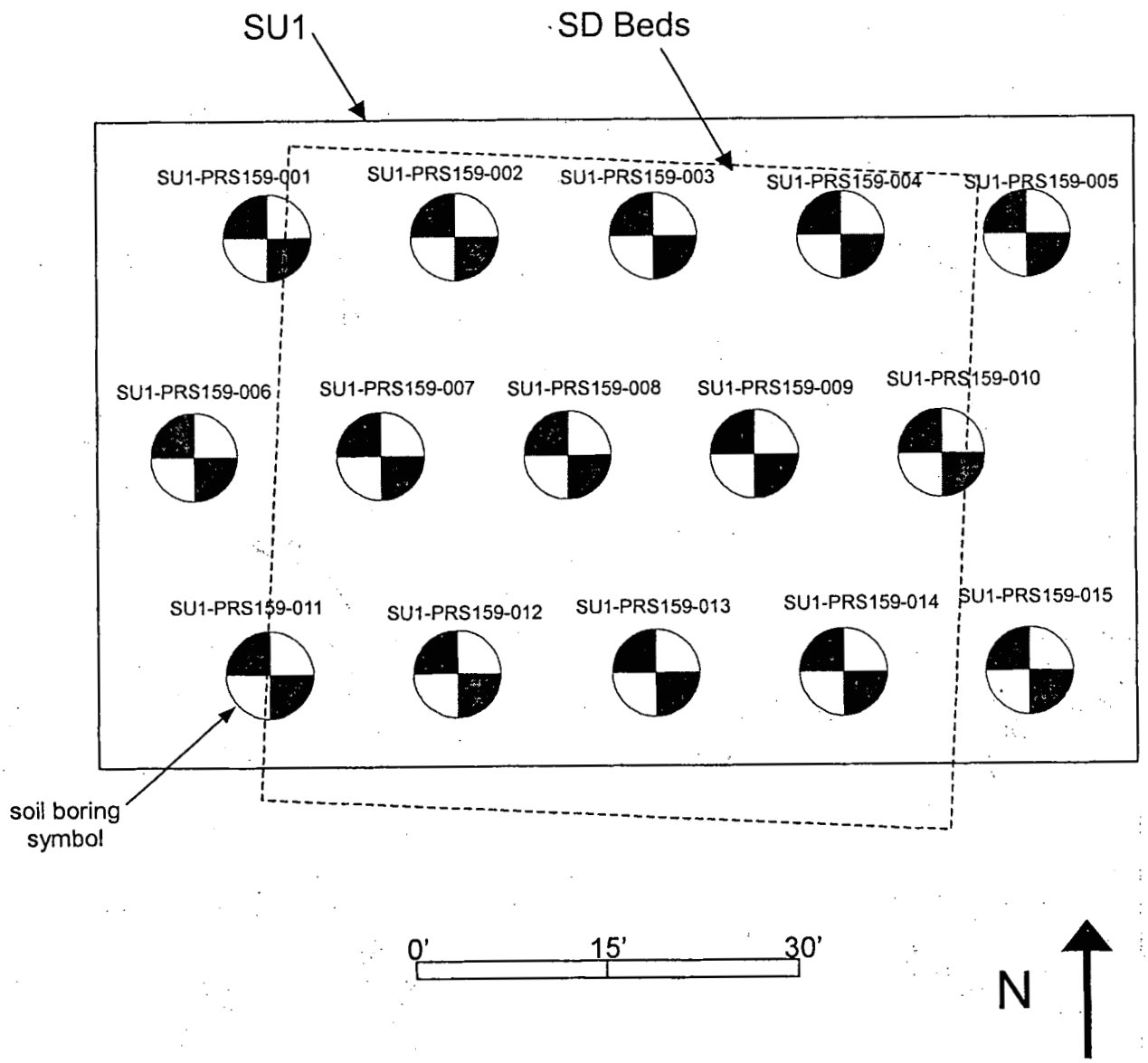


Figure 2: Verification Locations

APPENDIX B

TABLES

Table 1: Verification Results (pCi/g)

Location SU1-PRS	Date	Depth (feet)		Analyte	CO	Result	DL	DQ	LQ	Coordinates	
		Start	End							Easting	Northing
159-001	20051012	8.2	8.9	Plutonium-238	55	1.54	0.06	J		1464375	598437
159-001	20051012	8.2	8.9	Plutonium-239/240	62	0.016	0.048	UJ	U	1464375	598437
159-001	20051012	8.2	8.9	Thorium-228	2.6	1.01	0.09	J		1464375	598437
159-001	20051012	8.2	8.9	Thorium-230	2.8	0.86	0.09	J		1464375	598437
159-001	20051012	8.2	8.9	Thorium-232	2.1	1.12	0.06	J		1464375	598437
159-002	20051011	6.7	7.4	Plutonium-238	55	0.53	0.08	J		1464390	598437
159-002	20051011	6.7	7.4	Plutonium-239/240	62	0.021	0.053	UJ	U	1464390	598437
159-002	20051011	6.7	7.4	Thorium-228	2.6	1.14	0.14	J		1464390	598437
159-002	20051011	6.7	7.4	Thorium-230	2.8	1.02	0.11	J		1464390	598437
159-002	20051011	6.7	7.4	Thorium-232	2.1	1.01	0.13	J		1464390	598437
159-003	20051011	4.2	4.9	Plutonium-238	55	5.99	0.07	J		1464406	598437
159-003	20051011	4.2	4.9	Plutonium-239/240	62	0.103	0.053	J	J	1464406	598437
159-003	20051011	4.2	4.9	Thorium-228	2.6	1.16	0.15	J		1464406	598437
159-003	20051011	4.2	4.9	Thorium-230	2.8	0.79	0.07	J		1464406	598437
159-003	20051011	4.2	4.9	Thorium-232	2.1	1.3	0.07	J		1464406	598437
159-004	20051011	6.1	6.8	Plutonium-238	55	0.52	0.07	J		1464421	598437
159-004	20051011	6.1	6.8	Plutonium-239/240	62	0.056	0.056	UJ	U	1464421	598437
159-004	20051011	6.1	6.8	Thorium-228	2.6	1.01	0.11	J		1464421	598437
159-004	20051011	6.1	6.8	Thorium-230	2.8	1.08	0.13	J		1464421	598437
159-004	20051011	6.1	6.8	Thorium-232	2.1	1.26	0.11	J		1464421	598437
159-005	20051011	6	6.7	Plutonium-238	55	2.85	0.06	J		1464436	598437
159-005	20051011	6	6.7	Plutonium-239/240	62	0.051	0.028	J	J	1464436	598437
159-005	20051011	6	6.7	Thorium-228	2.6	0.73	0.07	J		1464436	598437
159-005	20051011	6	6.7	Thorium-230	2.8	0.81	0.04	J		1464436	598437
159-005	20051011	6	6.7	Thorium-232	2.1	0.87	0.07	J		1464436	598437
159-006	20051012	10.2	10.9	Plutonium-238	55	6.45	0.08	J		1464369	598419
159-006	20051012	10.2	10.9	Plutonium-239/240	62	0.056	0.062	UJ	U	1464369	598419
159-006	20051012	10.2	10.9	Thorium-228	2.6	1.04	0.17	J		1464369	598419
159-006	20051012	10.2	10.9	Thorium-230	2.8	1.04	0.18	J		1464369	598419
159-006	20051012	10.2	10.9	Thorium-232	2.1	1.22	0.13	J		1464369	598419
159-007	20051012	9.2	9.9	Plutonium-238	55	70.9*	0.05	J		1464384	598419
159-007	20051012	9.2	9.9	Plutonium-239/240	62	0.99	0.04	J		1464384	598419
159-007	20051012	9.2	9.9	Thorium-228	2.6	1.08	0.14	J		1464384	598419
159-007	20051012	9.2	9.9	Thorium-230	2.8	0.95	0.07	J		1464384	598419
159-007	20051012	9.2	9.9	Thorium-232	2.1	1.09	0.07	J		1464384	598419
159-008	20051012	5.7	6.4	Plutonium-238	55	8.3	0.06	J		1464399	598419
159-008	20051012	5.7	6.4	Plutonium-239/240	62	0.07	0.051	J	J	1464399	598419
159-008	20051012	5.7	6.4	Thorium-228	2.6	0.85	0.16	J		1464399	598419
159-008	20051012	5.7	6.4	Thorium-230	2.8	1.48	0.12	J		1464399	598419
159-008	20051012	5.7	6.4	Thorium-232	2.1	1.06	0.08	J		1464399	598419
159-009	20051012	4.3	5	Plutonium-238	55	0.204	0.044	J		1464414	598419
159-009	20051012	4.3	5	Plutonium-239/240	62	0.005	0.056	UJ	U	1464414	598419
159-009	20051012	4.3	5	Thorium-228	2.6	0.91	0.05	J		1464414	598419
159-009	20051012	4.3	5	Thorium-230	2.8	1.45	0.06	J		1464414	598419
159-009	20051012	4.3	5	Thorium-232	2.1	0.87	0.07	J		1464414	598419
159-010D	20051012	4.5	5.2	Plutonium-238	55	0.141	0.047	J	J	1464429	598419
159-010	20051012	4.5	5.2	Plutonium-238	55	0.098	0.05	J	J	1464429	598419
159-010D	20051012	4.5	5.2	Plutonium-239/240	62	0.03	0.03	UJ	U	1464429	598419

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Table 1: Verification Results (pCi/g)

Location SU1-PRS	Date	Depth (feet)		Analyte	CO	Result	DL	DQ	LQ	Coordinates	
		Start	End							Easting	Northing
159-010	20051012	4.5	5.2	Plutonium-239/240	62	0.03	0.03	UJ	U	1464429	598419
159-010D	20051012	4.5	5.2	Thorium-228	2.6	0.96	0.08	J		1464429	598419
159-010	20051012	4.5	5.2	Thorium-228	2.6	1.41	0.15	J		1464429	598419
159-010D	20051012	4.5	5.2	Thorium-230	2.8	1.16	0.06	J		1464429	598419
159-010	20051012	4.5	5.2	Thorium-230	2.8	1.2	0.12	J		1464429	598419
159-010D	20051012	4.5	5.2	Thorium-232	2.1	1	0.06	J		1464429	598419
159-010	20051012	4.5	5.2	Thorium-232	2.1	1.2	0.12	J		1464429	598419
159-011	20051012	7	7.7	Plutonium-238	55	0.217	0.027	J		1464375	598402
159-011	20051012	7	7.7	Plutonium-239/240	62	0.055	0.048	J	J	1464375	598402
159-011	20051012	7	7.7	Thorium-228	2.6	0.77	0.1	J		1464375	598402
159-011	20051012	7	7.7	Thorium-230	2.8	0.82	0.05	J		1464375	598402
159-011	20051012	7	7.7	Thorium-232	2.1	0.9	0.05	J		1464375	598402
159-012	20051013	5	5.7	Plutonium-238	55	0.145	0.067	J	J	1464390	598402
159-012	20051013	5	5.7	Plutonium-239/240	62	0.008	0.042	UJ	U	1464390	598402
159-012	20051013	5	5.7	Thorium-228	2.6	0.75	0.18	J		1464390	598402
159-012	20051013	5	5.7	Thorium-230	2.8	0.87	0.17	J		1464390	598402
159-012	20051013	5	5.7	Thorium-232	2.1	0.82	0.17	J		1464390	598402
159-013	20051013	1.6	2.3	Plutonium-238	55	0.025	0.056	UJ	U	1464406	598402
159-013	20051013	1.6	2.3	Plutonium-239/240	62	0.044	0.044	UJ	U	1464406	598402
159-013	20051013	1.6	2.3	Thorium-228	2.6	0.83	0.25	J		1464406	598402
159-013	20051013	1.6	2.3	Thorium-230	2.8	0.86	0.14	J		1464406	598402
159-013	20051013	1.6	2.3	Thorium-232	2.1	1.03	0.23	J		1464406	598402
159-014	20051013	2.9	3.6	Plutonium-238	55	0.087	0.059	J	J	1464421	598402
159-014	20051013	2.9	3.6	Plutonium-239/240	62	0.006	0.047	UJ	U	1464421	598402
159-014	20051013	2.9	3.6	Thorium-228	2.6	1.09	0.07	J		1464421	598402
159-014	20051013	2.9	3.6	Thorium-230	2.8	0.9	0.07	J		1464421	598402
159-014	20051013	2.9	3.6	Thorium-232	2.1	0.84	0.04	J		1464421	598402
159-015	20051011	2.9	3.6	Plutonium-238	55	0.86	0.06	J		1464436	598402
159-015	20051011	2.9	3.6	Plutonium-239/240	62	0.03	0.03	UJ	U	1464436	598402
159-015	20051011	2.9	3.6	Thorium-228	2.6	0.84	0.07	J		1464436	598402
159-015	20051011	2.9	3.6	Thorium-230	2.8	1.28	0.06	J		1464436	598402
159-015	20051011	2.9	3.6	Thorium-232	2.1	1.01	0.03	J		1464436	598402

D: duplicate
CO: cleanup objective
DL: detection limit
DQ: data qualifier
LQ: lab qualifier
J: estimate
U: not detected
* result above CO but passed statistical analysis

Table 2: 95% UCL Calculation for SU1 - Pu-238

Data File

Variable: 1.54

Raw Statistics	
Number of Valid Samples	15
Number of Unique Samples	15
Minimum	0.025
Maximum	70.9
Mean	6.581067
Median	0.53
Standard Deviation	17.99889
Variance	323.9599
Coefficient of Variation	2.73495
Skewness	3.726782

Gamma Statistics	
k hat	0.322522
k star (bias corrected)	0.302462
Theta hat	20.40499
Theta star	21.75829
nu hat	9.675675
nu star	9.073873
Approx.Chi Square Value (.05)	3.370867
Adjusted Level of Significance	0.03235
Adjusted Chi Square Value	2.956016

Log-transformed Statistics	
Minimum of log data	-3.68888
Maximum of log data	4.26127
Mean of log data	-0.22872
Standard Deviation of log data	2.141831
Variance of log data	4.587439

RECOMMENDATION

Assuming gamma distribution (0.05)

Use Adjusted Gamma UCL

Survey Unit 1

PASSES

when compared to the cleanup objective of 55 pCi/g

Normal Distribution Test	
Shapiro-Wilk Test Statisitic	0.396147
Shapiro-Wilk 5% Critical Value	0.881
Data not normal at 5% significance level	

95% UCL (Assuming Normal Distribution)	
Student's-t UCL	14.76639

Gamma Distribution Test	
A-D Test Statistic	1.031405
A-D 5% Critical Value	0.830722
K-S Test Statistic	0.201405
K-S 5% Critical Value	0.239321
Data follow approximate gamma distibution at 5% significance level	

95% UCLs (Assuming Gamma Distribution)	
Approximate Gamma UCL	17.71525
Adjusted Gamma UCL	**20.20144**

Lognormal Distribution Test	
Shapiro-Wilk Test Statisitic	0.970695
Shapiro-Wilk 5% Critical Value	0.881
Data are lognormal at 5% significance level	

95% UCLs (Assuming Lognormal Distribution)	
95% H-UCL	126.0532
95% Chebyshev (MVUE) UCL	20.39097
97.5% Chebyshev (MVUE) UCL	26.86737
99% Chebyshev (MVUE) UCL	39.58901

95% Non-parametric UCLs	
CLT UCL	14.22518
Adj-CLT UCL (Adjusted for skewness)	19.00343
Mod-t UCL (Adjusted for skewness)	15.5117
Jackknife UCL	14.76639
Standard Bootstrap UCL	13.94107
Bootstrap-t UCL	51.40701
Hall's Bootstrap UCL	42.14669
Percentile Bootstrap UCL	15.7662
BCA Bootstrap UCL	20.94233
95% Chebyshev (Mean, Sd) UCL	26.83814
97.5% Chebyshev (Mean, Sd) UCL	35.6034
99% Chebyshev (Mean, Sd) UCL	52.82104

Table 3: Calculation of Standard Deviaiton
(with actual verification data)

Location SU1-PRS	Analyte	Result
159-001	Plutonium-238	1.54
159-002	Plutonium-238	0.53
159-003	Plutonium-238	5.99
159-004	Plutonium-238	0.52
159-005	Plutonium-238	2.85
159-006	Plutonium-238	6.45
159-007	Plutonium-238	70.9
159-008	Plutonium-238	8.3
159-009	Plutonium-238	0.204
159-010	Plutonium-238	0.098
159-011	Plutonium-238	0.217
159-012	Plutonium-238	0.145
159-013	Plutonium-238	0.025
159-014	Plutonium-238	0.087
159-015	Plutonium-238	0.86
	Pu-238 Std Dev.	**17.99889**

159-001	Thorium-232	1.12
159-002	Thorium-232	1.01
159-003	Thorium-232	1.3
159-004	Thorium-232	1.26
159-005	Thorium-232	0.87
159-006	Thorium-232	1.22
159-007	Thorium-232	1.09
159-008	Thorium-232	1.06
159-009	Thorium-232	0.87
159-010	Thorium-232	1.2
159-011	Thorium-232	0.9
159-012	Thorium-232	0.82
159-013	Thorium-232	1.03
159-014	Thorium-232	0.84
159-015	Thorium-232	1.01
	Th-232 Std Dev.	**0.15834**

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Table 4: MARSSIM Spreadsheet

Sample Standard Deviation (s)	Radionuclide	Cleanup Objective	Units
	Ac-227+D		(pCi/g)
	Am-241		(pCi/g)
	Ce-141		(pCi/g)
	Cs-137+D		(pCi/g)
	Co-60		(pCi/g)
	Cu-244		(pCi/g)
	Pb-210+D		(pCi/g)
	Np-237+D		(pCi/g)
	Ni-95		(pCi/g)
17.99	Pu-238	55	(pCi/g)
	Pu-239/240		(pCi/g)
	Pa-231+D		(pCi/g)
	Ra-226+D		(pCi/g)
	Ra-228		(pCi/g)
	Th-228+D		(pCi/g)
	Th-230+D		(pCi/g)
0.16	Th-232+D	2.1	(pCi/g)
	U-233+D		(pCi/g)
	U-234		(pCi/g)
	U-234+D		(pCi/g)
	U-235		(pCi/g)
	U-235+D		(pCi/g)
	U-238		(pCi/g)
	U-238+D		(pCi/g)
	Bi-207		(pCi/g)
	Bi-210m		(pCi/g)
	Tc-99		(pCi/g)
	Sr-90		(pCi/g)

Type I Error	0.05		
$Z_{1\text{-alpha}}$	1.645		
Type II Error	0.2		
$Z_{1\text{-beta}}$	0.842		
Effective	0.34	*(s)*	
Sign p	0.919243		

Calculate the Total Effective (s)

Estimate (N) - Sign Test

DCGL	1
LBGR	0.50
Delta	0.50
(s)	0.34
Rel Shift	1.489
(N)	11.00

Pu-238 Area Factor (N) 244

Sample Grid Spacing

SU Area	392.27	m^2
Grid Length	5.6	m
Grid Height	4.8	m

Sample Grid Spacing

SU Area	4218	ft^2
Grid Length	18.2	ft
Grid Height	15.8	ft

PRS	PRS159	Survey Unit	SU1

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Table 5: Sign Test

COC: Pu-238

SD Beds Sample ID	Sample Depth (see Table 1 for actual depths)	Offsite analysis (pCi/g) Pu-238 result	Pu-238 MDA	Sign Test
159-001	at-depth	1.54	0.06	+
159-002	at-depth	0.53	0.08	+
159-003	at-depth	5.99	0.07	+
159-004	at-depth	0.52	0.07	+
159-005	at-depth	2.85	0.06	+
159-006	at-depth	6.45	0.08	+
159-007	at-depth	**70.9**	0.05	-
159-008	at-depth	8.3	0.06	+
159-009	at-depth	0.204	0.044	+
159-010	at-depth	0.098	0.05	+
159-011	at-depth	0.217	0.027	+
159-012	at-depth	0.145	0.067	+
159-013	at-depth	0.025	0.056	+
159-014	at-depth	0.087	0.059	+
159-015	at-depth	0.86	0.06	+

CO	55	Sum:	14
Hot Spot	165	Adj. N	15
Max Obs	70.9	k Crit	11
Mean	7	(from Table I.3 MARSSIM)	
Standard Deviation	18	P/F	**PASS**
Number of Samples	15		

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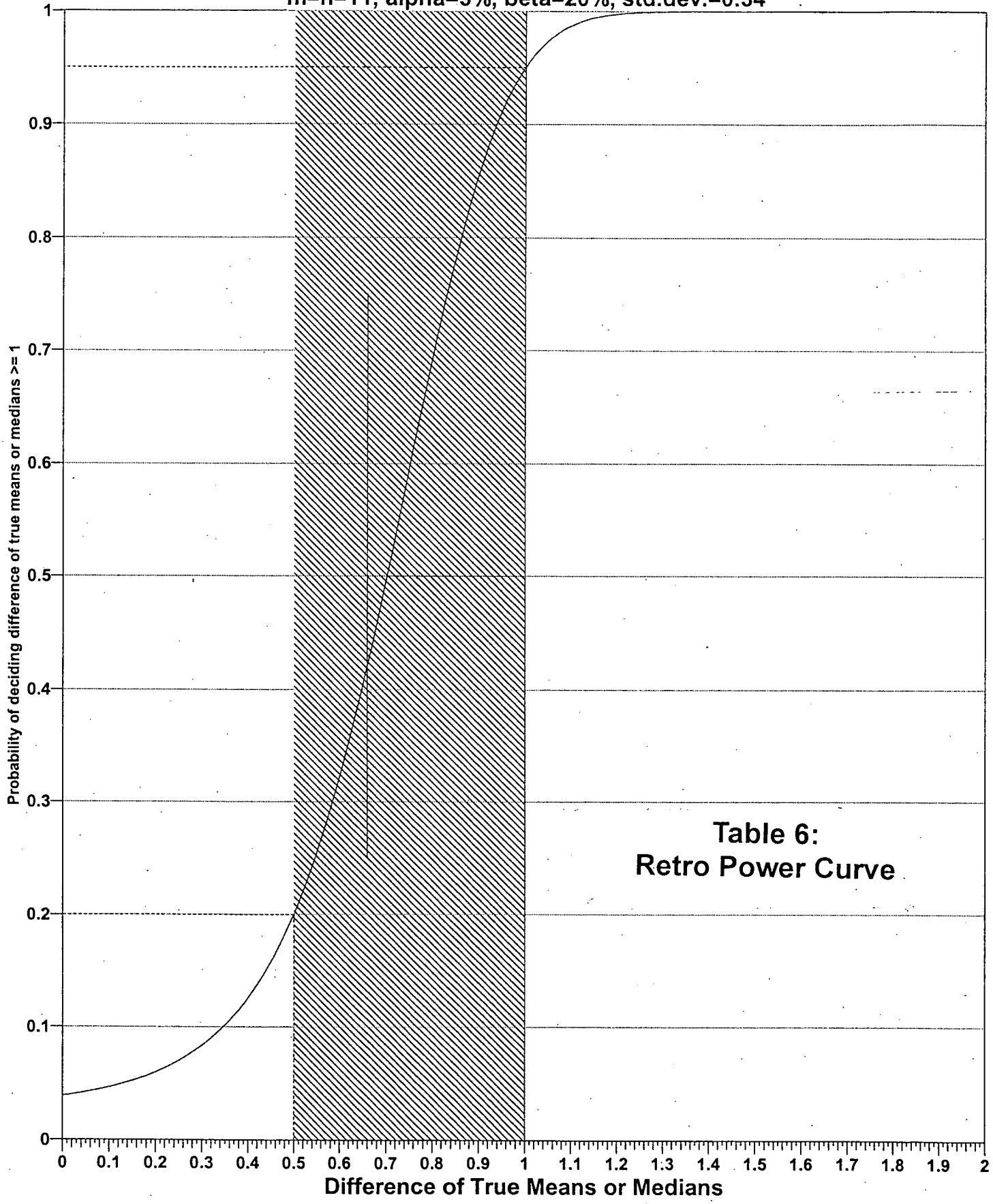
MARSSIM WRS Test

m=n=11, alpha=5%, beta=20%, std.dev.=0.34



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APPENDIX C

POST-EX SUD EXCERPT

Survey Unit Design (SUD)

Project: PRSs 159, 155 – 158, & WD Footprint

Review & Approval

Project Engineer: Karen Arthur _____

Reviewer: James Fontaine CKline for J. Fontaine

Reviewer: _____

Document	Title
Action Memo	*UGL Action Memorandum, Final, September 2003*
RP	*UGLs Removal Plan. Final, April 2004*
WP	*Soil Removal, ELT-MND-105-00, April 2004*
VSAP	*Standard Verification Sampling & Analysis Plan, Final, August 2004*

Changes from Pre-Ex:

D&D Work Plan	*Work Package, SD Building and Surrounding Soils Title II, 17 April 1996*

☐ **Pre-Excavation** or ☑ **Post-Excavation**? → PostEx SUD Partial I (includes SU1 of PRS 159 only)

Summary of Changes (for Post-Excavation SUDs ONLY) (see following pages for details)	YES	NO	Comment
1. Did the COC(s) change?		x	
2. Did the grid size or N change?		x	
3. Did the classification change?		x	
4. Were bias/judgmental samples collected?		x	
5. Other significant change?	x		Drilling instead of excavating overburden

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SUD Worksheet

Acronyms

AM	Action Memo
BGS	Below Ground Surface
CO	Cleanup Objective
COC	Contaminant of Concern
ELT	Earthline Technologies (Subcontractor for the UGL project)
EPA	Environmental Protection Agency
FSS	Final Status Survey
HS	Hot Spot
M^2	Square Meters
MARSSIM	Multi – Agency Radiation Survey and Site Investigation Manual
MDC	Minimum Detectable Concentration
MEIMS	Mound Environmental Information Management System
MND	Mound
OP	Operation
PCi/g	pico (10^{-12}) curies per gram
Pu238	Plutonium 238
PRS	Potential Release Site
QA/QC	Quality Assurance/Quality Control
RadCon	Radiological Control
RASS	Remedial Action Support Survey
SD	Sanitary Disposal (SD) Building
Std dev	Standard Deviation
SU	Survey Unit
SUD	Survey Unit Design
Th230, Th232	Thorium 230, Thorium 232
U238	Uranium 238
UGL	Underground Lines
VSAP	Verification Sampling and Analysis Plan
WD	Waste Disposal (WD) Building
WDA	Waste Disposal Annex (WDA) Building
WP	Work Package

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Item 1

Summary of historic information relevant to this SUD:

The Removal Plan associated with this SUD addressed identified contamination areas with contaminants of concern (COCs) above the cleanup objectives (COs).

PRSs 155-159 are all PRSs associated with the old SD Plant. PRS 159 is identified in the UGL Action Memo, Table 2, as "Area 4A, Sewage Sludge Drying Pits / Removed 1997." Figure 1 from the UGL AM, attached herein, also designated PRS 159 as the overall boundary identifier (designated by a dashed line) which includes these PRSs as well as the WD building footprint. Removals were previously performed in these areas but verification/confirmation was not performed. No COCs are listed in the UGL AM for PRSs 155-158. Contaminants will be those identified during RadCon soil surveying activities and added to the Post Excavation SUD. Per the UGL AM, where no remediation work is required, e. g., the previously removed (~1997) SD Sludge Drying Pits, only verification sampling is required. COCs for PRS 159 are Pu238 and Th232. In addition, several historical samples within the PRS 159 boundaries are above cleanup objectives and will be removed as part of the remediation effort. See Figure 2, Anticipated Limits of Excavation, PRS 159 Area, which defines the remediation effort. See also Item 10 which describes actions taken in the field to ensure all contamination has been discovered and removed.

WD Footprint is an area of soil removal below the former WD Building, which was removed in the spring of 2004.

Although PRS 413 is located within the PRS 159 Area, a separate SUD is planned for that PRS because it is a chemical (creosote) PRS and not a radiological PRS. Subsequent to the removal action and verification sampling described in this (PRS159) SUD, verification of PRS 413 will be accomplished.

Changes if any, from Pre-ex SUD:

Clarification. None of the historic results above CO mentioned above are within SU1, and therefore are not addressed in this Post-Ex SUD for SU1.

Item 2

Summary of historic **data** relevant to SU:

PRS 155-158: Authorizing Document: UGL Action Memo, Final, September 2003. No contaminants listed in the UGL AM; contaminants will be those identified during RadCon soil surveying activities.

PRS 159: Authorizing Document: UGL Action Memo, Final September 2003. Contaminants include: Pu238 and Th232. Historical samples indicate contamination varies from the surface to ten feet bgs.

WD Footprint: Authorizing Document: UGL Action Memo, Final, September 2003. No contaminants listed in the UGL AM. Pre-excavation soil sampling indicates COCs Pu-238 and Th-230. In addition, historical samples above cleanup objectives indicate the addition of TH232. (see SUs 3-5)

RASS samples will be collected during the removals. Any contaminant found in the RASS sampling process above the CO will be added to the list of COCs.

Item 3a

COC	BASIS	(pCi/g) CO	(pCi/g) HS	Offsite Analysis & Compendium Method: gamma (A-015)	Iso Pu (A-012)	Iso Th (A-012)	Iso U (A-012)
Pu238	*Based on UGL AM: PRS 159*	55	165.13		X		

Th232	*Based on UGL AM: PRS 159*	2.1	3.5			X	
Th230	*WD footprint (SUs 3-5) based on pre-excavation soil samples*	2.8	4.6			X	

Analyses are to be performed per Mound Methods Compendium and COs (for surface samples/analysis i.e., bedrock, asphalt, concrete) as applicable. Compendium Method A-012 is Isotopic Uranium, Isotopic Plutonium, and Isotopic Thorium by Alpha Spectrometry. Surface samples/analysis are to be in accordance with MD-80036: OP 10001, 10002, 30005, 30007, and 30040. Hard surfaces will be swiped and gross alpha and beta measurements will be performed and compared to the most restrictive COC in Mound 2000 Work Plan Appendix A Table 1 (NUREG 1.86 Regulatory Guide). If the location fails to meet the most restrictive criteria then it will be sent to alpha spec for determination of the COC so the applicable, instead of the most restrictive, criteria can be applied.

Changes if any, from Pre-ex SUD:
For SU1, former SD drying beds, the COCs are Pu-238 and Th-232.

Item 3b

Chem basis for std dev, AM COCs/New COCs NA

Item 4

Classify Areas & provide justification

All five SUs are Class 1.

Selection	Class	Scan Coverage guidelines
X	1	100%
	2	10-90%
	3	Judgmental

Changes if any, from Pre-ex SUD: NONE

Item 5

Subdivide areas into SUs

See Attachment A for Figures

See Attachment B for Historical Sample Data – Standard Deviations for COCs. The data set is historical data without results that exceed COs in order to mimic the "as-left" condition.

See Attachment C for MARSSIM Survey Unit Spreadsheets

This SUD consists of five SUs (see attached Figure 3): (SUs were selected based on physical location and common COCs.)

SU1 covers the former sludge drying beds and drum removal area of PRS 159, and is approximately 4220 sq. ft. COCs: Pu238 and Th232.
SU2 covers the southern portion of PRS 159, and is approximately 500 sq. ft. (Five small dig locations.). COCs: Pu238 and Th232.
SU3 covers the western portion of WD Building including the old SD Plant Area & soil northwest of WDA. This survey unit includes PRSs 155-158 and is approximately 11,900sq. ft. COCs: Pu238, Th230, and Th232.
SU4 covers the central portion of WD Building, including the soil area south of the building. This area is approximately 6930 sq. ft. COCs: Same as SU3.
SU5 covers the eastern portion of WD Building and is approximately 13,980 sq. ft. COCs: Same as SU3.

Changes if any, from Pre-ex SUD:

A note on Figure 2 of the Pre-Ex SUD indicates overburden removal prior to sampling SU1. Instead, samples will be collected at the former base of excavation by soil borings to the backfill interface and collection of sample in the former base of excavation. Coordinates of borings are presented in Appendix II. The MARSSIM SU Spreadsheet for SU-1 is presented in Appendix II.

Item 6a	Calculations / Rad 1. Calculate the (s) for each COC listed above: See Attachment C. 2. Number of Samples (N): See Attachment C. Spreadsheet-Calculated Numbers of Samples: SU1 = 12; SU2 =12; SU3 = 15; SU4 = 15 and SU5 = 15. Scanning MDC (Area Factor) corrected number of samples: SU1 = 244, SU2 = 16, SU3 = 1074, SU4 = 504, SU5 = 1250 Default 15 foot triangular grid (see Figure 3): Sample locations were selected by overlaying onto the SU a 15-foot triangular plan with a random starting point. The determination of the number of samples is consistent with section 3.7 of the standard VSAP, which provides a default grid spacing for SUs where PU-238 is the primary driver in the removal action. SU1 = 15, SU2 = 5, SU3 = 51, SU4 = 28, SU5 = 62 A total of 161 sample locations will be assessed.
	Changes if any, from Pre-ex SUD: NO CHANGES FOR SU-1
Item 6b	Calculations/Chem, Std dev, Number of Samples N/A
	Changes if any, from Pre-ex SUD: NONE
Item 7	Grid spacing From Attachment A, Figure 2, triangular 15 foot grid except SU2 where each sub area (SU2a-SU2e) contain one sample each due to each <100m2
	Changes if any, from Pre-ex SUD: NO CHANGES FOR SU-1. Correction: The figure referenced in Item 7 above should be Figure 3 and not Figure 2.
Item 8	**QA/QC:** Collection of QA/QC samples shall be in accordance with the Standard VSAP, Final, August 2004. Q-002 Chain-of-Custody Procedures Q-003 Documentation Requirements Q-004 Laboratory Data Reduction Q-006 Validation of Laboratory Data Packages Q-007 Data Assessment Q-008 Data Integrity Verification Q-010 Electronic Data Deliverable Format Specifications – MEIMS Std. ... S-001 General Instructions for Field Personnel S-002 Soil Sampling With a Spade and Scoop S-028 Sample Control and Documentation S-029 Guide to Handling, Packaging, and Shipping of Samples and Method Q-002
Item 9	Bias/judgement samples. None planned. (Additional bias samples are always within the discretion of the EPA.)

Item 10	Not otherwise covered.../ comments Site policy requires performance of onsite soil screening (NaI or germanium) on verification samples slated for offsite analysis and evaluation of the results prior to shipment. This analysis will generally be performed on a split of the verification sample containerized in an EPA dish (approximately 500 mL) but may be performed on the actual verification sample as long as containerization requirements are maintained for the offsite lab. Count time of the analysis will be sufficient to meet the cleanup objectives (COs) of the contaminants of concern (COCs) requiring verification. In-process sampling events (Characterization and RASS samples) will be conducted during the entire PRS remediation. Those samples will undergo gamma spectrometry analysis to guide actions. . On site gamma spec typically provides results for: Co-60, Cs-137, Pb-210, Ra-226, Ac-227 (D), Th-230, Th-232 (D), Pu-238, and Am-241. In addition, any isotopes identified to be greater than their MDA (e.g., U-238, Bi-210m, etc.) will be reported on the analytical results sheet. Any exceedances of the CO associated with any isotope will constitute disposal as contaminated waste and inclusion as a COC."RASS sampling and process knowledge of the remediated areas will be used to determine when the FSS (verification) sampling could be conducted. These samples undergo gamma spectroscopy analysis and, where historical Th230 or U238 locations are above cleanup objectives, samples will be taken and analyzed via alpha spectroscopy Potentially impacted areas where excavated materials are loaded into haulers will be included in an existing or additional survey unit, as appropriate. MARSSIM spreadsheets for Load Out Survey Units shall include the same COCs as the adjacent SU.

B23/30

APPENDIX D

BACKFILL PACKAGE

None required as no excavation was performed.

APPENDIX E

DATA REVIEW & VALIDATION

1.0 Introduction

Analytical data can be evaluated on at least three quality control levels:

Data Review involves an assessment of the quality controls used by the laboratory during the performance of the analysis. These include such things as laboratory blanks, system monitoring compound (surrogate) recoveries, matrix spikes, etc. Which controls are assessed and what criteria are applied depend on the analysis performed. The results of field quality control measures such as field duplicates and trip blanks may also be evaluated. Data Review is normally performed on 100% of the analytical data.

Data Validation is a more detailed review of the entire laboratory data package. It includes all of the elements of the Data Review plus verification of such checks as proper instrument calibration, proper use of standards and correct performance of data calculations. Data Validation is used to identify systemic problems with the way the laboratory performs and reports analyses.

Data Assessment may also evaluate whether project data quality objectives and other program needs that led to the collection of samples in the first place were met. Data assessment typically draws on the results of data validation of one or more data sets.

2.0 Description of the Data Set

This data assessment covers samples collected October 11-13, 2005, from the Miamisburg Closure Project to confirm environmental compliance prior to site closure. Offsite sample analyses were performed at Severn-Trent Laboratories of Earth City (St. Louis), MO, as analytical batch (LSDG) F5J180223. Samples included 16 solid and one aqueous (rinsate) samples, among which were a field duplicate sample pair - solid samples 000220 and 000226 (F5J180223-010 and -016). Matrix spike sample analyses were appropriately performed for analytical QC purposes.

There were no problems associated with the documentation, shipment, or chain of custody of the samples. Analyte detection goals were achieved, except in the situation where high levels of one analyte required sample dilution, raising detection limits for other analytes as well. Table 1 summarizes the identification of the samples and the analyses performed (next page); the analytical methods performed were:

- Alpha spectroscopy for isotopic plutonium (Pu) and isotopic thorium (Th) by DOE Environmental Monitoring Lab (EML) Method A-01-R, Modified.

Table 1
Sampling Information

Field Sample ID	Laboratory ID	Date Sampled	QC Sample ID
000211	F5J180223-001	12 Oct 2005	
000212	F5J180223-002	11 Oct 2005	
000213	F5J180223-003	11 Oct 2005	
000214	F5J180223-004	11 Oct 2005	
000215	F5J180223-005	11 Oct 2005	
000216	F5J180223-006	12 Oct 2005	MS / MSD
000217	F5J180223-007	12 Oct 2005	
000218	F5J180223-008	12 Oct 2005	
000219	F5J180223-009	12 Oct 2005	
000220	F5J180223-010	12 Oct 2005	Field Duplicate of 000226
000221	F5J180223-011	12 Oct 2005	
000222	F5J180223-012	13 Oct 2005	
000223	F5J180223-013	13 Oct 2005	
000224	F5J180223-014	13 Oct 2005	
000225	F5J180223-015	11 Oct 2005	
000226	F5J180223-016	12 Oct 2005	Field Duplicate of 000220
000227	F5J180223-017	12 Oct 2005	Rinsate

KEY:
MS/MSD = The sample was also analyzed spiked for QC purposes.
= Sample is an aqueous (rinsate) sample.

3.0 Data Review

The quality control (QC) data submitted with the analytical data packages were reviewed and assessed. The results of the assessment are presented in this section. The following qualification flags are used to indicate data quality problems identified during the data review process.

Table 2 - Data Review Qualifications

Flag	Description
J	Estimated sample result
U	Non-detect sample result
UJ	Non-detected sample result at an estimated reporting limit
R	Rejected (unusable) sample result – (NOT required for these data)

3.1 Tracer Recovery

The laboratory spikes every alpha spectrometry sample with Th-229 (and other isotopes if appropriate). The percent recovery of this isotope is then used to scale the detected presence of the target isotopes. To fully meet QC criteria the isotope recovery must be between 30 – 110 % and have an accumulated count of at least 200 counts. Tracer recovery for all samples met QC criteria, but for over half of the samples recoveries were only 30-42%.

3.2 Blanks

The laboratory analyzes one blank for every 20 samples or LSDG (lab sample delivery group). Laboratory blanks are analyzed to determine if laboratory processes are contributing to the detected sample activities. Laboratory blanks were analyzed at an appropriate frequency.

The laboratory method blank associated with the solid verification samples was either free of contamination or was contaminated at such low levels relative to the concentrations in the associated field samples that data qualification was not needed (the situation for Th-230). However, the laboratory blank associated with the rinsate sample contained a nearly identical level of Th-230 as the rinsate. As a result, the value for the rinsate was qualified as nondetect due to the high likelihood that laboratory contamination was the cause of this value. After this qualification, the rinsate was nondetect for all target isotopes.

3.3 Laboratory Duplicate

A laboratory duplicate analysis is performed to assess the precision and accuracy of the laboratory analysis. At least one duplicate is performed for every 20 samples or LSDG. In some cases, the laboratory counted a matrix spike duplicate (MSD) or lab control sample (LCS) duplicate as the laboratory duplicate in order to achieve this frequency; no data were qualified for these occurrences.

To meet QC criteria the relative error ratio (RER) of duplicate samples must be < 3.0, or if one or both results are nondetect.

$$RER = \frac{[\text{Sample Result} - \text{Duplicate Result}]}{[TPU^2_{sample} + TPU^2_{dup}]^{1/2}}$$

TPU: total propagated uncertainty

It is known that for Mound soils contamination is usually distributed non-homogeneously even in dried and ground samples. Divergent results obtained from analysis of second portions from the same sample, if found, are a demonstration of this fact and not of the laboratory capability for precision.

For the reported isotopes, relative percent differences were unacceptable for Pu-238 in solids, and Th-230 in the rinsate sample. As a result, Pu-238 in all solid samples was qualified as estimated ("J" or "UJ"), and the Th-230 result in the rinsate was qualified "UJ," having been previously qualified "U" for method blank contamination.

3.4 Matrix Spike

Matrix spike (MS) and matrix spike duplicate (MSD) analyses are performed to assess the precision and accuracy of the laboratory analysis. One MS/MSD is to be performed for every 20 samples of a given matrix or at least once per LSDG. This frequency was met.

All percent recoveries were biased high, ranging from 135% to 246%. As a result of this potential across-the-board bias, results for all isotopes in soil samples were qualified "J" as estimated, or "UJ" as nondetect at an estimated reporting limit. Additionally, Th-230 was qualified "J" as estimated in all solid samples as a result of poor precision between the MS and MSD recoveries.

3.5 Laboratory Control Sample

The Laboratory Control Sample (LCS) is a standard sample with a known quantity of the analyte of concern. The LCS recovery is an indication of whether the analytical process was in control during the analysis. The LCS recoveries were within QC requirements, demonstrating good analytical accuracy, and were analyzed at an acceptable frequency.

3.6 Equipment Rinsates

Equipment rinsates are used to ensure efficacy of equipment field decontamination procedures, and that the sample collection process is not causing cross contamination. All of therinsates were free of measurable contamination.

For this sampling event, one aqueous (rinse) sample was collected and 16 field samples were collected. This frequency meets the 1/20 frequency required for this project.

As noted in Section 3.2, after qualifying the rinsate data for laboratory blank contamination, the rinsate results were all nondetect.

3.7 Field Duplicates

Field duplicates give an indication of the degree of homogeneity within the sample material. As with laboratory duplicates, they are reported as RER. Agreement between field duplicates was acceptable for all analyte pairs. One field duplicate sample was reported for this sampling event.

As noted under laboratory duplicates, it is known that for Mound soils contamination is usually distributed non-homogeneously even in dried and ground samples. If divergent results are obtained from analysis of field duplicate pairs from the same sampling location, such an outlier would be a demonstration of this fact.

Solid samples 000220 and 000226 (F5J180223-010 and -016) were field duplicate samples. Acceptable agreement was obtained between the two analyses, except for Pu-238 and Th-228. These isotopes were qualified as estimated in the solid samples as a result of these outliers.

3.8 Other Issues

Consistent with standard laboratory practice, detected results that were found below the required reporting limit were qualified as estimated by the laboratory. These results have inherently poor precision, as they are close to the analytical detection limit. The qualifiers were retained during data validation, and pose no significant limitation to data usability.

Nondetect results where the uncertainty was greater than the absolute value of the result were present, and were qualified "UJ" (nondetect at an estimated reporting limit), as the sample count may be less than the background reading in such cases. These instances did not result in data rejection; the results may be used as estimated values.

4.0 Data Validation

The results of 10% of samples in each LSDG were fully data validated. In addition to the items discussed above, the following items were evaluated:

1. Instrument calibration
2. Daily Source checks
3. Background and efficiency measurement
4. Proper frequency and use of blanks
5. All calculations

No additional qualification resulted from this assessment. There was no indication of a systemic deficiency.

5.0 Certification

Based upon this review the analytical data maybe used as presented with no further qualifications. No data required rejection; 100% completeness for all analyses was obtained.

ATTACHMENT C

GENERAL MEDIA INFORMATION

(There was no information released to the media regarding the subject PRSs)