XXV(1) S

ENGINEERING CHANGE NOTICE

Page 1 of 5

1. ECN 657095

Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No.	4. USQ Required?	5. Date
Supplemental [] Direct Revision [X] Change ECN [] Temporary [] Standby [] Supersedure [] Cancel/Void []	H.R. Risenmay, Stabilization, T5-55, 373-3503	[X] Yes [] No	April 19, 2000
	6. Project Title/No./Work Order No. Thermal Stabilization	7. Bldg./Sys./Fac.No. PFP/73T/234-5Z	8. Approval Designator N/A
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) HNF-4989, Rev. 0	10. Related ECN No(s). N/A	11. Related PO No. N/A

12a. Modification Work	12b. Work Package No.	12c. Modification Work Complete	12d. Restored to Original Condition (Temp. or Standby ECN only)
[] Yes (fill out Blk. 12b) [X] No (NA Blks.12b, 12c, 12d)	N/A	N/A Design Authority/Cog. Engineer Signature & Date	N/A Design Authority/Cog. Engineer Signature & Date

13a. Description of Change

13b. Design Baseline Document? [] Yes [X] No

The referenced document was changed to include additional oxide items for processing.

14a. Justification (mark one)

Criteria Change [X]	Design Improvement []	Environmental []	Facility Deactivation []
As-Found []	Facilitate Const []	Const. Error/Omission []	Design Error/Omission []

14b. Justification Details

Items of lower dose rate for handling were needed to cut the exposure to the workers.

15. Distribution (include name, MSIN, and no. of copies)

See Distribution Sheet

RELEASE STAMP
APR 20 2000
DATE:
STA: 5
HANFORD RELEASE
ID: 12

A-7900-013-2 (05/96) GEF095

ENGINEERING CHANGE NOTICE	Page 2 of 2	1. ECN (use no.from pg.1) 657095

16. Design Verification Required	17. Cost Impact						18. Schedule Impact (days)		
	ENGINEERING			CONSTRUCTION					
[] Yes	Additional	[]	$	Additional	[]	$	Improvement	[]	
[X] No	Savings	[]	$ N/A	Savings	[]	$ N/A	Delay	[]	N/A

19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	[]	Seismic/Stress Analysis	[]	Tank Calibration Manual	[]
Functional Design Criteria	[]	Stress/Design Report	[]	Health Physics Procedure	[]
Operating Specification	[]	Interface Control Drawing	[]	Spares Multiple Unit Listing	[]
Criticality Specification	[]	Calibration Procedure	[]	Test Procedures/Specification	[]
Conceptual Design Report	[]	Installation Procedure	[]	Component Index	[]
Equipment Spec.	[]	Maintenance Procedure	[]	ASME Coded Item	[]
Const. Spec.	[]	Engineering Procedure	[]	Human Factor Consideration	[]
Procurement Spec.	[]	Operating Instruction	[]	Computer Software	[]
Vendor Information	[]	Operating Procedure	[]	Electric Circuit Schedule	[]
OM Manual	[]	Operational Safety Requirement	[]	ICRS Procedure	[]
FSAR/SAR	[]	IEFD Drawing	[]	Process Control Manual/Plan	[]
Safety Equipment List	[]	Cell Arrangement Drawing	[]	Process Flow Chart	[]
Radiation Work Permit	[]	Essential Material Specification	[]	Purchase Requisition	[]
Environmental Impact Statement	[]	Fac. Proc. Samp. Schedule	[]	Tickler File	[]
Environmental Report	[]	Inspection Plan	[]	None	[X]
Environmental Permit	[]	Inventory Adjustment Request	[]		[]

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number Revision
N/A		

21. Approvals

Signature	Date	Signature	Date
Design Authority H.R.Risenmay		Design Agent	
Cog. Eng. H.R.Risenmay H.R.Risenmay	4-19-2000	PE	
Cog. Mgr. R.A. Burk RABurk	4/20/00	QA	
QA		Safety	
Safety		Design	
Environ.		Environ.	
Other,		Other	
		DEPARTMENT OF ENERGY	
		Signature or a Control Number that tracks the Approval Signature	
		ADDITIONAL	

This Document is UNCLASSIFIED.
Work Performed under Contract No. DE-AC06-96RL13200 Document is
UNCLASSIFIED
CONFIDENTIAL
SECRET
Signature 04/19/00 Date
AUTHORIZED CLASSIFIER

UNREVIEWED SAFETY QUESTION (USQ) SCREENING AND EVALUATION

1. Identification Number: HNF-4989/REV 1	USQ SCREENING	Page 1 of 3

2. Title: THERMAL STABILIZATION BLEND PLAN

INSTRUCTIONS: Respond to each question and provide justification for each response. A restatement of the question does not constitute a satisfactory justification or basis. An adequate justification provides sufficient explanation such that an independent reviewer could reach the same conclusion based on the information provided [DOE 5480.21, 10.e.1].

DESCRIPTION:
New items are added to the blend plan for thermal stabilization processing of items located outside of 213MBA.

INTRODUCTION:
The Blend Plan was written to identify items stored outside of the 213 MBA that will be moved into the MBA for thermal stabilization processing. Product quality oxide items stored in our vaults are found in Appendix A. A table is included in Appendix A which details the isotopic values for the oxide items and calculates the amount of material of any specific run that can be placed in a product can and maintain the 15 watt limit to meet storage vault specifications. This Revision of the Blend Plan adds items of lesser dose rate to lower the exposure of the workers until additional shielding can be added to the gloveboxes.

AFFECTED SSC:
This Blend Plan specifies the items that are to be thermally stabilized at the PFP plant in HA-21I and HC-21C glovebox during the processing campaign.

AUTHORIZATION BASIS:
The authorization basis documents reviewed were HNF-SD-CP-SAR-021 Revision 1 (FSAR) and WHC-SD-CP-OSR-010, Revision 0-L (OSR); specifically section 6.4.1.1, Process Description - Reactive Material Stabilization and Solution Stabilization; section 6.4.1.2 Process Chemistry and Physical Chemistry Principles - Reactive Material Stabilization, which discuss the thermal stabilization process chemistry; section 6.4.1.4.5 Operating Limits - Reactive Material Stabilization and Plutonium-bearing Solution Stabilization and associated Table 6-5. Reactive Plutonium-Bearing Material Stabilization Operating Limits; section 9.1.3, Radioisotope-Bearing Powder Spills; section 9.1.4, Radioisotope-Bearing Pressurized Powder Container; section 9.1.8, Loss of Ventilation; section 9.1.9, Glovebox Glove Breach; section 9.1.11, Reactive Material Thermal Stabilization Process; section 9.2B.1, Accidents Postulated for the Thermal Stabilization of Plutonium Oxide Process; section 9.2B.2, Assessment of Thermal Stabilization of Plutonium Oxide Process Impacts on Original Accident Analyses; all found in the FSAR and the OSR.

CONCLUSION:
There is no need for a USQ evaluation and no change to the FSAR is needed.

REFERENCES:
None.

QUESTIONS:

1.Does the proposed change or occurrence represent a change to the facility or procedures as described in the

UNREVIEWED SAFETY QUESTION (USQ) SCREENING AND EVALUATION		
1. Identification Number: HNF-4989/REV 1	USQ SCREENING	Page 2 of 3
2. Title: THERMAL STABILIZATION BLEND PLAN		

Authorization Basis?
[] N/A [X] No [] Yes/Maybe

BASIS: Handling of thermally stabilized material is considered normal operations. The changes to the blend plan are discussed above in the introduction. The changesto the document do not represent any change to facility or procedures as described in the Authorization Basis.

2.Does the proposed change or occurrence represent conditions that have not been analyzed in the Authorization Basis?
[] N/A [X] No [] Yes/Maybe

BASIS: Thermal stabilization of Pu bearing material does not go beyond any conditions mentioned in FSAR. Section 9.1.3, Radioisotope-Bearing Powder Spills; section 9.1.4, Radioisotope-Bearing Pressurized Powder Container; section 9.1.8, Loss of Ventilation; section 9.1.9, Glovebox Glove Breach; section 9.1.11, Reactive Material Thermal Stabilization Process; section 9.2B.1, Accidents Postulated for the Thermal Stabilization of Plutonium Oxide Process; section 9.2B.2, Assessment of Thermal Stabilization of Plutonium Oxide Process Impacts on Original Accident Analyses; section 9.2.10.1, all found in the FSAR discuss all the accidents associated with the thermal stabilization process. No new accident could be caused by the addition of more oxide items to the document as discussed in the introduction and do not represent a change to the Authorization Basis.

3.Does the proposed change represent a test or experiment NOT described in the Authorization Basis that may affect the safe operation of the facility?
[X] N/A [] No [] Yes/Maybe

BASIS: The issuance of the document does not comprise a test or experiment.

4.Does the proposed change or occurrence represent a change to the Technical Safety Requirements or a reduction in the margin of safety defined in the Technical Safety Requirements?
[] N/A [X] No [] Yes/Maybe

BASIS: No Safety Limits for PFP are specified in OSR, so a margin of safety cannot be affected. No OSR change is proposed.

UNREVIEWED SAFETY QUESTION (USQ) SCREENING AND EVALUATION

1. Identification Number: HNF-4989/REV 1	USQ SCREENING	Page 3 of 3

2. Title: THERMAL STABILIZATION BLEND PLAN

USQE #1 H. R. Risenmay
(Print Name)

H. Ross Risenmay
Signature

Date: April 19, 2000

USQE #2 J. P. Krug
(Print Name)

Jeffrey P. Krug
Signature

Date: 4/19/00

If there is a YES/MAYBE response to questions 1, 2, 3, or 4, then a USQ Evaluation must be completed.

The following guidance should be considered when completing this screening. This guidance should not be considered all-inclusive; additional factors may need to be considered depending on the nature of the proposed change.

Does the proposed change:

1) Modify, add, or delete a safety class function of a structure, system or component stated in the authorization basis?
2) Alter the design of a structure, system or component as described in the authorization basis?
3) Modify, add, or delete the description of operation, operating environment, or analyses of any system or component described in the authorization basis? Modify, add, delete or conflict with any of the design bases stated in the authorization basis?
4) Conflict with the principle or general design criteria stated in the authorization basis?
5) Modify, add, or delete any plant design features described in the authorization basis?
6) Modify, add, or delete a flow diagram or facility drawing provided in the authorization basis?
7) Create the potential for new system or component interactions (e.g., seismic, electrical breaker coordination)?
8)

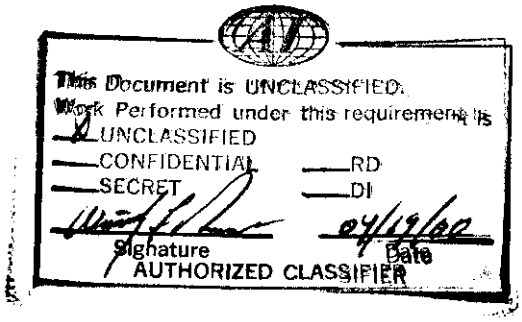
HNF-4989
Revision 1

Thermal Stabilization Blend Plan

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Fluor Hanford
P.O. Box 1000
Richland, Washington



Approved for public release; further dissemination unlimited

HNF-4989
Revision 1
ECN 657095

Thermal Stabilization Blend Plan

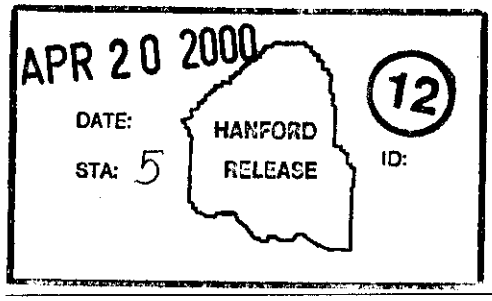
H. R. Risenmay
Fluor Hanford

Date Published
April 2000

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

Fluor Hanford
P.O. Box 1000
Richland, Washington



Release Approval Date 4/20/00

Release Stamp

Approved for public release; further dissemination unlimited

LEGAL DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

This report has been reproduced from the best available copy.

Printed in the United States of America

Total Pages: 54

RECORD OF REVISION	(1) Document Number HNF-4989	Page 1

(2) Title
THERMAL STABILIZATION BLEND PLAN

CHANGE CONTROL RECORD			
(3) Revision	(4) Description of Change - Replace, Add, and Delete Pages	Authorized for Release	
		(5) Cog. Engr.	(6) Cog. Mgr.Date
0	(7) EDT 627486 released 8/19/1999		
RS 1	This revision per ECN 657095 adds Additional items to Appendix A.	H.R.Risenmay H.Ris Risen 4-19-2000	R.A. Burk RABurk 4/20/00

TABLE OF CONTENTS

		PAGE
I.	INTRODUCTION	2
II.	MATERIAL TO BE PROCESSED	2
III.	PROCESS ORDER	4
IV.	REFERENCES	4
APPENDIX A - OXIDES		5

I. INTRODUCTION

This Blend Plan documents the feed material items ~~for the thermal stabilization process~~ that are ~~located outside the 213 MBA. Items within the 213 MBA will be found in the classified Blend Plan, HNF-3425. This blend plan lists plutonium oxide~~ stored in 2736-Z vaults, the 2736-ZB 638 cage, the 192C vault, and the 225 vault that will be processed through the thermal stabilization furnaces.

The purpose of thermal stabilization is to heat the material to 1000 degrees Celsius to drive off all water~~volatile materials~~ and leave the plutonium and/or uranium as oxides. The stabilized material will be sampled to determine the Loss On Ignition (LOI) or percent water. The stabilized material must meet water content or LOI of less than 0.5% to be acceptable for storage under DOE-STD-3013-994 specifications. Out of specification material will be recycled through the furnaces until the water or LOI limits are met.

II. MATERIAL TO BE PROCESSED

~~Feed material and items were selected using the criteria in the Process Control Plan (Reference). The list in the appendix reflect the application of that criteria to the data available for each item. A classified database containing elemental weights and locations is separately available to assist operations and engineering in detailed selections.~~

~~A.~~ OXIDES

The~~is~~ bulk of this material is currently stored in the 2736-Z Vaults. Additional items are found in the 638 cage, 225 vault, and the 192C vault. Radiographs of some of the items indicates that some of the material is in a lead cup inside a slip lid can, a plastic bag, and two clean overpack cans. Others are in any combination of 2 to 4 overpacked cans. The material will be processed to meet DOE-STD-3013-994 specifications.

The batch limits imposed by the OSD on oxides are 2725 grams net weight per batch containing 2400 grams of Pu. ~~The EIS and FSAR analysis for thermal stabilization have been revised in HNF-SD-CP-SAR-021, Rev. 1, and have been approved by DOE. The new limits are based on the criticality limits for both the individual boat/batch and the glovebox.~~ -The total Pu element weight allowed in the HC-21C glovebox by the criticality specification is 5000 grams. The total Pu element weight allowed in each individual boat/batch by the criticality specification is 2500 grams. This does not give any room for glovebox holdup. The typical glovebox holdup is about 50 grams Pu. The limit for each boat has been set at 2400 grams Pu per batch by the OSD which will allow 200 grams Pu for HC-21C glovebox holdup when two boats are being processed. Glovebox HA-211 has a glovebox limit of 7500 grams Pu which gives 300 grams available for holdup when three boats are in process. To simplify calculations needed during processing, the material is assumed to be 88% Pu (typical of product quality oxide) which resulted in the net weight batch size of 2725 grams specified in the OSD. The items selected for processing will meet these limits by splitting and combining items as needed during the furnace charge

preparation process.

Some of the items in Appendix AB can be loaded into the PUREX slip lid can to exceed the vault storage specification of 15 watts/item for thermal loading. Appendix AB includes a table to be used with the Process Traveler to specify the maximum material that can be combined into one item when processing the oxide items. However, all the information on isotopic analysis was not available for all the items included in Appendix AB. The isotopic analysis will need to be determined as items are prepared for transfer to 234-5Z for thermal stabilization. As the missing data in the table at the front of Appendix AB becomes available the data table will be recalculated and the table will be reprinted as a separate spreadsheet that and can then be used for determining allowable loading of the stabilized material in the product cans. The table in Appendix AB will be used to determine which items need to have isotopic analysis performed before transfer to 234-5Z for processing.

Ordinarily, material will be processed as batches when those batches can be identified. Much of the oxide material was produced as batches and blended in a *V blender* batch and loaded into product cans. The product cans are identified with the same batch number with the difference in ID number being the *can number* for the item.

When it is not possible to identify batches the following criteria will be used to determine what materials can be mixed together in the boat charge makeup or filling of the product cans:

The isotopic contents of the original items must be similar, i.e:

- The Am-241 range cannot be greater than 0.4%
- The Pu-238 range cannot be greater than0.11%
- The Pu-240 range cannot be greater than 5%

If only the isotopic analysis for Pu 240 is available then that will be sufficient. The criteria above for Pu 240 will be used to determine what material can be mixed together.

~~TOTAL ITEMS SELECTED: 580~~

III. PROCESS ORDER

Items to be processed through thermal stabilization are found in appendix A. The exact order of processing will be specified in the approved Process Traveler Sheets referred to in the Operating Instructions (OI) and will be based on guidance provided in this document ~~and document HNF-3425~~. Operations and ~~Process~~ the Cog Engineer~~ing~~/STA will concur/determine items to process and approve each OI. The Process Travelers and the daily OI should take into consideration good ALARA practices to keep radiation dose and handling of items to a minimum. This would include processing of items from the same vault location at the same time when possible, but all material from one batch will be processed sequentially. This could entail accessing several vault locations to retrieve the necessary items for processing. ~~Other criteria in the Process Control Plan will also be adhered to during the selection of items each day~~.

IV. REFERENCES

~~Process Control Plan for FY 1999 Thermal Stabilization, HNF-3393, Rev. 1; B&W Hanford Company; Richland, Washington; December 2, 1998~~

Thermal Stabilization Glovebox HC-21C; OSD-Z-184-00006, Rev. D-6~~3~~; B&W Hanford Company; Richland, Washington; August 19, 1999.

Thermal Stabilization Process Flowsheet; PFD-Z-190-00004, Rev D-2~~1~~; B&W Hanford Company; Richland, Washington; February 9, 1999.

Plutonium Finishing Plant Stabilization Final Environmental Impact Statement, DOE/EIS-0244-F; Department of Energy, Richland Operations Office, Richland, Washington; May, 1996.

PFP Final Safety Analysis Report, HNF-SD-CP-SAR-021, Rev. 1, B&W Hanford Company, Richland, Washington, January 11, 1999.

APPENDIX A

OXIDE ITEMS LOCATED IN 2736-Z VAULTS

In following tables:

CAT
5 = WG Plutonium conversion other scrap
6 = FG Plutonium conversion other scrap
10 = MBA 212 PMP scrap
20 = FG Pu rec miscellaneous scrap
41 = WG Analytical laboratories miscellaneous scrap
42 = FG Analytical laboratories miscellaneous scrap
51 = WG Ctl miscellaneous scrap
52 = FG Ctl miscellaneous scrap
61 = Stabilized oxide
62 = Stabilized Scrap
63 = Stabilized PRF scrap
64 = Stabilized C line scrap
67 = FG BNW scrap pwd
73 = WG BNW miscellaneous scrap
74 = FG BNW miscellaneous scrap
91 = HEDL Pu oxide scrap
102 = WG oxide for recovery
111 = BNW items for storage
112 = HEDL oxide for storage
114 = Oxide fuels grade A line
145 = Miscellaneous fuels grade samples
148 = Miscellaneous fuels grade oxide
150 = Burned button oxide
173 = Oxide fuels grade
175 = Oxide fuels grade other
451 = 303-c scrap from BNW
455 = FG Pu oxide contaminated
465 = WG plutonium-aluminum oxide or scrap
482 = FG Plutonium oxide
849 = Radiation sources for recovery
850 = Radiation sources

COEI:
454 = Dioxides product
455 = Other oxides product
746 = In other R&D usage
771 = Samples and standards
C00 = Plutonium nonconforming compounds
C01 = Oxides (low fired, relatively pure)

C02 = Oxides (high fired)
C30 = Encapsulated plutonium compounds/UR carbides
G00 = Nonconforming residues
G05 = Reduction residues/residues to be leached

The following item category codes are weapons grade (WG) material and no wattage limits are necessary. Items with the same category code can also be mixed together without problems regarding the isotopic values:

102	28	36	41
42	43	5	51
61	62	63	64
73			

The following item identification prefixes are not wattage limited. Items with the same prefix can be mixed together without problems regarding the isotopic vaues:

A-*	BH-*	CAF-*	CCS-*
CCT-*	PZ-*	WEC-*	

* is the rest of the item identification number.

Use the following table to determine acceptable mass limits for individual items produced during thermal stabilization of oxide items. The last column on the right contains the amount of Pu~~material~~ from any run that will give 15 watts/item, which is the storage vault specification limit. If the data is missing then request isotopic analysis of the items be performed before the items are transferred to 234-5Z for processing. The STA or Cog. Engineer will then ~~enter~~ use the isotopic information ~~into~~ calculate~~a spreadsheet and will provide~~ the amount ~~information~~ of material needed for product can loading.

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
6-84-12-484		89.26	10.74				2.5	6042.8
6-84-12-548		89.04	10.96				2.5	6015.3
6-85-01-04		89.06	10.94				2.5	6017.8
6-85-01-05		89.97	10.03				2.4	6133.2
6-85-01-70		88.5	11.5				2.5	5948.9
6-85-01-73		88.5	11.5				2.5	5948.9
6-86-01-66		88.54	11.46				2.5	5953.8
67-77-03-308		82	18				2.9	5251.3
67-77-03-309		82	18				2.9	5251.3
67-77-03-310		82	18				2.9	5251.3
67-77-03-311		82	18				2.9	5251.3
67-77-03-312		82	18				2.9	5251.3

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	*0.56757*	*0.0019288*	*0.0070824*	*0.1142*	*0.0001159*	*0.1142*		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
67-77-03-313		82	18				2.9	5251.3
67-77-03-314		82	18				2.9	5251.3
67-77-03-316		82	18				2.9	5251.3
67-77-03-317		82	18				2.9	5251.3
67-77-03-318		82	18				2.9	5251.3
67-77-03-319		82	18				2.9	5251.3
67-77-03-320		82	18				2.9	5251.3
74-88-12-367		91.763	8.237				2.4	6374.0
16-X-5-6		94	6				2.2	6702.4
83-X-2-16		84	16				2.8	5447.9
204-X-284-12		88	12				2.5	5888.7
STD-208-X-100-6		94	6				2.2	6702.4
209-X-249-6		94	6				2.2	6702.4
214-X-25-8		92	8				2.3	6407.3
215-X-50-8		92	8				2.3	6407.3
217-X-247-8		92	8				2.3	6407.3
222-X-025-10		90	10				2.4	6137.1
STD-225-X-243-10		90	10				2.4	6137.1
230-X-23-12		88	12				2.5	5888.7
232-X-101-12		88	12				2.5	5888.7
STD-259-X-168-24		76	24				3.2	4738.3
261-X-221-12		88	12				2.5	5888.7
GE-QC-10		88.5	11.5				2.5	5948.9
GE-QC-14		88.5	11.5				2.5	5948.9
GE-QC-17		88.5	11.5				2.5	5948.9
GE-QC-18		88.5	11.5				2.5	5948.9
GE-QC-20		88.5	11.5				2.5	5948.9
GE-QC-21		88.5	11.5				2.5	5948.9
GE-QC-22		88.5	11.5				2.5	5948.9
GE-QC-23		88.5	11.5				2.5	5948.9
GE-QC-24		88	12				2.5	5888.7
GE-QC-25		88	12				2.5	5888.7
GE-QC-26		88	12				2.5	5888.7
PPSL-183								
QC-14		88	12				2.5	5888.7
QC-15		88	12				2.5	5888.7
QC-96-09-001	0.06	87.344	11.901	0.597	0.098	1.54	5.3	2825.6
TD-1B		94.321	5.679				2.2	6752.3
TD-2		94.321	5.679				2.2	6752.3
XDT-148-81-12		78.04	18.01	3.95			7.3	2057.1
YEB-474-77-01-04		83.5	16.5				2.8	5397.3
YEB-474-77-01-05		83.5	16.5				2.8	5397.3
YEC-36-01-023	0.068	79.128	17.344	2.772	0.688		6.3	2378.3
YDZ-36-10-01								

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
YDZ-36-10-02								
YUD-148-81-07		80.23	16.67	3.1			6.3	2393.0
YUD-148-81-08-01		78.7	18.39	2.91			6.1	2441.5
YUD-148-81-09		79.58	17.51	2.91			6.1	2459.7
YUD-148-81-10		80.33	16.57	3.1			6.3	2395.0
19B14-A		93.7	6.3				2.3	6656.4
20-74-07-495		88.5	11.5				2.5	5948.9
451-83-09-841		92	8				2.3	6407.3
67-74-07-485		79	21				3.0	4981.6
102-F-200-6		94	6				2.2	6702.4
251M-200-2		97.86	2.14				2.0	7356.2
253M-212-8		92	8				2.3	6407.3
254M-191-12		88	12				2.5	5888.7
256M-161-22		77.65	22.35				3.1	4869.1
240-N-1-12		88	12				2.5	5888.7
241-N-2-12		88	12				2.5	5888.7
242-N-1-12		88	12				2.5	5888.7
243-N-5-12		88	12				2.5	5888.7
244-N-7-12		88	12				2.5	5888.7
245-N-10-12		88	12				2.5	5888.7
263-N-2-8		92	8				2.3	6407.3
265-N-5-8		92	8				2.3	6407.3
266-N-7-8		92	8				2.3	6407.3
39-XA-100-6		94	6				2.2	6702.4
40-XA-150-6		94	6				2.2	6702.4
104-XS-5-6		94	6				2.2	6702.4
108-XS-25-6		94	6				2.2	6702.4
110-XS-38-6		94	6				2.2	6702.4
84-X-2-16		84	16				2.8	5447.9
85-X-2-16		84	16				2.8	5447.9
86-X-2-16		84	16				2.8	5447.9
87-X-2-16		84	16				2.8	5447.9
88-X-2-16		84	16				2.8	5447.9
89-X-2-16		84	16				2.8	5447.9
90-X-2-16		84	16				2.8	5447.9
91-X-2-16		84	16				2.8	5447.9
92-X-2-16		84	16				2.8	5447.9
145-174-X-7-6		94	6				2.2	6702.4
STD-207-X-50-6		94	6				2.2	6702.4
216-X-100-8		92	8				2.3	6407.3
223-X-50-10		90	10				2.4	6137.1
224-X-100-10		90	10				2.4	6137.1
231-X-51-12		88	12				2.5	5888.7
90-75-08-677	0.397	73.579	22.947	1.518	1.559		7.0	2132.8

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
90-75-08-680	0.0722	74.7473	23.74482	0.8925	0.54318		4.6	3294.5
90-75-08-687		76	24				3.2	4738.3
A-28-1-37		92.54	7.46				2.3	6484.4
AM-3H-01 SWEEP		90	10				2.4	6137.1
AO-31-28 SWEEP		90	10				2.4	6137.1
AS-31H-57 SWEEP		90	10				2.4	6137.1
CE-5-203-8		76	24				3.2	4738.3
CE-6-265-8		82	18				2.9	5251.3
CZA-465-72-08		95	5				2.2	6860.3
CZA-465-72-23		95	5				2.2	6860.3
CZA-465-72-24		95	5				2.2	6860.3
CZA-465-72-25		95	5				2.2	6860.3
CZA-469-74-228		59.46	40.54				4.0	3733.1
EAB-3-2-1 PART		93.5	6.5				2.3	6626.1
EF-1-S SWEEPS		91.5	8.5				2.4	6337.5
GEO-30-08-001		80.5	19.5				2.9	5112.9
GE-QC-27		88	12				2.5	5888.7
HUA-40-10-01	0.56	72.6	19.43	5.49	1.92		12.2	1226.8
HUA-40-10-02	0.56	72.6	19.43	5.49	1.92		12.2	1226.8
HUA-40-10-03	0.56	72.6	19.43	5.49	1.92		12.2	1226.8
HUA-40-10-04	0.56	72.6	19.43	5.49	1.92		12.2	1226.8
S-22S-2		90.105	9.895				2.4	6150.7
ZLS-588-75-81		93	7				2.3	6551.5
10-89-07-84		94.5	5.5				2.2	6780.4
10-89-07-88		94.5	5.5				2.2	6780.4
22260	0.06	81.8	16.46	1.32	0.36	0.02	4.6	3250.4
22277	0.06	82.18	16.24	1.17	0.35	0.02	4.4	3382.0
6-85-01-46		88.69	11.31				2.5	5972.1
6-85-01-85		88.77	11.23				2.5	5981.9
6-85-02-131		89.33	10.67				2.5	6051.6
ACO-29-12-001 S	0.172	88.439	9.722	1.512	0.155		5.1	2942.6
B707		94.5	5.5				2.2	6780.4
CZA-001		81.566	15.7	2.734			5.8	2582.9
GE-QC-7		88.5	11.5				2.5	5948.9
GE-QC-8		88.5	11.5				2.5	5948.9
GE-QC-9		88.5	11.5				2.5	5948.9
GES-33-06-001	0.104	76.492	19.769	3.54	0.095		7.5	1997.7
K412		94.5	5.5				2.2	6780.4
NX-29-02-S63-31		74.676	20.999	4.325			7.9	1906.8
NX-29-02-S63-32		74.676	20.999	4.325			7.9	1906.8
NX-29-03-S56-27		74.676	20.999	4.325			7.9	1906.8
NX-29-03-S56-28		74.676	20.999	4.325			7.9	1906.8
NX-29-03-S56-29		74.676	20.999	4.325			7.9	1906.8
O-30-03-4-5		86.164	11.817	2.019			4.8	3122.0

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
O-30-09-001 C		86.164	11.817	2.019			4.8	3122.0
PPSL-102								
PPSL-103								
PPSL-104								
PPSL-225								
WBO-30-10-1-2		86.674	11.592	1.734			4.5	3353.5
ZPS-28-09-049-40-A		84.8	12.9	2.3			5.2	2898.1
ZPS-28-12-019-19		84.8	12.9	2.3			5.2	2898.1
ZYP-30-09-001-0001		81.947	13.4	4.653			7.8	1912.4
ZYP-30-09-001-0002		81.947	13.4	4.653			7.8	1912.4
BLO-38-11-004								
BLO-38-11-010								
BLO-39-10-15	0.332	78.200	16.935	3.420	1.113	1.760	10.5	1427.4
BLO-39-10-16	0.392	73.132	21.025	3.833	1.618	2.100	11.9	1260.3
BLO-39-10-17	0.391	73.013	21.106	3.848	1.642	2.080	11.9	1261.1
BLO-39-10-18	0.383	73.583	20.685	3.771	1.578	2.460	12.2	1232.0
BLO-39-10-19	0.459	73.295	20.421	4.164	1.661	2.280	12.8	1169.5
BLO-39-10-20	0.687	75.333	17.202	5.234	1.544	2.150	15.0	999.7
BLO-39-10-021	0.769	76.047	15.954	5.670	1.560	3.160	17.0	879.9
BLO-39-11-01	0.675	76.341	16.149	5.287	1.548	3.160	16.1	931.9
BLO-39-11-02	0.702	76.057	16.160	5.482	1.599	3.190	16.5	909.0
BLO-39-11-03	0.780	76.199	15.723	5.716	1.582	3.240	17.2	870.1
BLO-39-11-04	0.837	76.417	15.301	5.907	1.538	3.280	17.8	842.6
BLO-39-11-05	0.807	76.458	15.244	5.954	1.537	3.220	17.6	851.6
BLO-39-11-06	0.862	76.431	15.155	6.015	1.537	3.330	18.1	828.1
BLO-39-11-07	0.868	76.385	15.142	6.071	1.534	3.310	18.2	824.8
BLO-39-11-08	0.954	74.624	16.128	6.452	1.842	3.060	18.9	795.3
BLO-39-11-09	1.034	74.330	16.163	6.563	1.910	3.190	19.6	765.8
BLO-39-11-10	1.005	74.594	16.056	6.470	1.875	3.120	19.2	779.9
BLO-39-11-11	1.024	74.242	16.274	6.552	1.908	2.770	19.0	787.6
BLO-39-11-12	1.009	74.064	16.433	6.562	1.932	3.120	19.4	774.1
BLO-39-11-13	1.010	73.887	16.569	6.563	1.971	2.800	19.0	788.4
BLO-39-11-14	0.990	74.004	16.534	6.525	1.947	3.200	19.3	776.2
BLO-39-11-15	0.966	74.349	16.422	6.373	1.890	3.170	19.0	790.3
BLO-39-11-16	0.410	51.878	36.453	7.181	4.078	4.020	18.7	801.9
BLO-39-11-17	0.285	47.395	40.540	7.306	4.474	4.050	18.4	816.3
BO-28-01-001-04								
BO-28-01-001-05								
BO-28-01-001-06								
BO-28-01-001-07								
BO-28-01-002-04								

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
BO-29-02-S63-30								
BO-29-03-058-B	0.093	76.410	21.400	1.991	0.106	2.365	8.5	1766.4
BO-30-10-001-A	0.359	77.005	18.418	3.255	0.963	3.790	12.9	1165.1
BO-30-10-001-B								
BO-30-10-002-B	0.359	81.530	14.447	3.249	0.415	4.320	13.3	1129.6
BO-30-10-003-A								
BO-30-10-003-B	0.364	81.310	14.680	3.203	0.443	4.321	13.3	1130.8
BO-30-10-004-B	0.368	77.168	18.480	3.892	0.092	3.577	13.4	1117.9
BO-30-10-005-1	0.386	80.210	15.400	3.490	0.514	4.094	13.5	1112.1
BO-30-10-005-2	0.354	79.440	17.234	1.999	0.975	5.569	13.4	1119.0
BO-30-10-006-1	0.371	79.450	16.550	2.968	0.661	4.463	13.3	1128.0
BO-30-10-006-2	0.354	79.700	16.989	1.992	0.960	5.559	13.4	1121.4
BO-30-10-007-1	0.388	80.370	15.190	3.558	0.494	4.047	13.5	1110.0
BO-30-10-007-2	0.371	79.160	16.953	2.534	0.983	5.001	13.4	1115.9
BO-30-10-008-1	0.357	78.010	17.960	3.576	0.097	3.768	13.2	1137.4
BO-30-10-008-2	0.384	79.880	15.910	3.755	0.072	3.839	13.5	1109.7
BO-30-11-012-1								
BO-30-11-012-2	0.595	77.113	16.408	4.381	1.503	3.797	15.4	976.0
BO-30-11-013-1	0.506	79.210	16.020	4.183	0.082	4.297	15.2	985.7
BO-30-11-013-2	0.491	77.910	17.420	4.097	0.082	4.108	14.9	1007.2
BO-30-11-014								
BO-30-11-043-1	0.227	82.120	14.990	2.207	0.456	2.698	9.5	1573.2
BO-30-11-043-2	0.218	81.040	16.330	1.753	0.660	3.314	9.7	1539.8
BO-30-11-044-1	0.439	79.480	16.250	3.208	0.623	4.602	14.1	1064.0
BO-30-11-044-2	0.473	79.510	15.860	3.576	0.581	4.173	14.2	1056.9
BO-30-11-045-1	0.453	80.180	15.400	3.447	0.521	3.950	13.7	1098.6
BO-30-11-045-2	0.426	78.820	16.690	3.384	0.680	3.889	13.4	1117.4
BO-30-11-046-1	0.490	80.910	14.550	3.582	0.428	4.685	14.8	1012.7
BO-30-11-046-2	0.505	78.630	16.350	3.865	0.650	4.506	15.1	993.1
BO-30-11-047-1	0.585	77.095	16.982	3.744	1.593	4.681	15.6	959.4
BO-30-11-047-2								
BO-30-11-047-3								
BO-30-11-048-1	0.468	78.140	17.370	3.934	0.088	3.814	14.2	1053.1
BO-30-11-048-2	0.471	78.650	16.810	3.977	0.092	3.745	14.2	1056.4
BO-30-11-049	0.455	76.180	19.260	4.011	0.094	4.059	14.6	1025.2
BO-30-11-11-1								
BO-30-11-11-2	0.967	71.041	21.906	4.183	1.903	4.595	18.4	813.6
BO-30-11-11-3								
DZO-35-09-002	0.419	73.590	22.640	3.236	0.115	1.841	11.2	1339.3
DZO-35-09-003								
DZO-35-09-004								
DZO-35-09-005								
DZO-35-09-006	0.434	72.820	23.180	3.449	0.117	1.808	11.5	1302.8

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
DZO-35-09-007	0.444	72.878	21.868	3.011	1.800	2.034	11.2	1334.9
DZO-35-09-008								
DZO-35-09-009								
DZO-35-09-010								
DZO-35-09-011								
DZO-35-09-013								
DZO-35-09-015								
DZO-35-09-016								
DZO-35-09-019								
DZO-35-09-020	0.440	73.048	21.675	3.093	1.744	2.345	11.7	1287.2
DZO-35-09-021	0.425	74.386	20.742	2.972	1.474	2.498	11.6	1296.8
DZO-35-09-022								
DZO-35-09-023	0.427	74.055	21.871	3.538	0.109	1.994	11.7	1280.0
DZO-35-09-024								
DZO-35-09-025								
DZO-35-09-026	0.398	74.402	21.731	3.357	0.112	1.974	11.3	1324.8
DZO-35-09-027								
DZO-35-09-028								
DZO-35-09-029								
DZO-35-09-030								
DZO-35-09-031								
DZO-35-09-032	0.409	75.120	21.090	3.270	0.112	2.107	11.4	1315.6
DZO-35-09-033								
DZO-35-09-034								
DZO-35-09-035								
DZO-35-09-036	0.384	74.110	22.240	3.162	0.104	2.155	11.3	1332.9
DZO-35-09-037								
DZO-35-09-038								
DZO-35-09-039								
DZO-35-09-040								
DZO-35-09-041								
DZO-35-09-042								
DZO-35-09-043								
DZO-35-09-044	0.412	73.091	22.990	3.394	0.113	2.021	11.6	1297.5
DZO-35-09-045								
DZO-35-09-046								
DZO-35-09-047								
DZO-35-09-048	0.400	74.631	21.420	3.435	0.113	1.964	11.4	1316.9
DZO-35-09-049								
DZO-35-09-050								
DZO-35-09-051								
DZO-35-09-052	0.372	75.260	20.960	3.298	0.110	1.978	11.1	1354.7
DZO-35-09-053								

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
DZO-35-09-054	0.365	74.861	21.540	3.132	0.101	2.082	11.0	1364.3
DZO-35-09-055								
DZO-35-09-056	0.373	74.441	21.800	3.280	0.106	1.964	11.1	1353.3
DZO-35-09-057								
DZO-35-09-058	0.373	74.341	21.950	3.231	0.105	1.915	11.0	1365.8
DZO-35-09-059	0.371	75.571	20.690	3.270	0.098	2.032	11.1	1353.1
DZO-35-09-060	0.381	72.878	22.152	2.717	1.871	2.337	10.9	1374.6
DZO-35-09-061	0.390	73.716	21.394	2.853	1.647	2.285	11.0	1360.9
DZO-35-09-062	0.386	73.950	22.440	1.930	1.297	3.331	11.2	1337.1
DZO-35-09-063								
DZO-35-09-064								
DZO-35-09-065								
DZO-35-09-066								
DZO-35-09-067								
DZO-35-09-068	0.389	74.530	21.590	3.385	0.106	1.968	11.3	1328.8
DZO-35-09-069								
DZO-35-09-070								
DZO-35-09-071								
DZO-35-09-072								
DZO-35-09-073								
DZO-35-09-074	0.364	74.500	22.226	1.657	1.255	3.553	11.0	1360.3
DZO-35-09-075								
DZO-35-09-076								
DZO-35-09-077	0.368	75.490	20.770	3.276	0.096	1.973	11.0	1362.4
DZO-35-09-078	0.392	73.561	22.540	3.392	0.115	1.876	11.3	1332.7
DZO-35-09-079								
DZO-35-09-080	0.387	73.900	22.310	3.295	0.108	2.003	11.3	1333.1
DZO-35-09-081								
DZO-35-09-082								
DZO-35-09-287-A	0.483	69.504	24.088	3.280	2.645	4.160	14.3	1050.0
DZO-35-09-287-B	0.459	74.190	21.600	3.639	0.112	4.283	14.6	1026.4
DZO-35-09-294-A	0.846	81.730	12.800	4.342	0.282	5.921	19.0	789.2
DZO-35-09-294-B	0.835	74.671	19.320	5.080	0.094	4.358	18.3	818.6
DZO-35-09-295-A	0.693	80.840	14.180	4.221	0.066	4.574	16.5	906.9
DZO-35-09-295-B								
DZO-35-09-301-A	0.750	78.874	15.751	4.552	0.073	4.649	17.4	862.2
DZO-35-09-301-B	0.802	78.520	16.150	3.902	0.627	5.631	18.1	829.0
DZO-35-09-302-A	0.869	78.914	15.355	4.330	0.531	5.274	18.5	810.3
DZO-35-09-302-B								
DZO-35-09-303-A	0.797	79.241	15.200	4.685	0.077	4.752	17.9	837.8
DZO-35-09-303-B	0.824	77.630	16.940	4.523	0.083	4.973	18.2	823.3
DZO-35-10-025-A	0.279	76.780	19.700	2.057	1.184	1.844	8.9	1682.5
DZO-35-10-026-A	0.188	85.280	12.880	1.386	0.266	1.218	6.6	2273.2

Isotope	Pu-238	Pu-239	Pu-240	Pu-241	Pu-242	Am-241		
Watts/gram	0.56757	0.0019288	0.0070824	0.1142	0.0001159	0.1142		
Run No.	%Pu-238	%Pu-239	%Pu-240	%Pu-241	%Pu-242	%Am-241	Watts/kg.	grams/pkg.
DZO-35-10-027-A	0.307	73.530	22.180	2.140	1.843	2.032	9.5	1579.6
DZO-35-10-028-A	0.154	80.870	16.900	1.400	67.610	1.180	6.7	2254.0
DZO-35-10-043-A	0.226	85.190	12.470	1.869	0.245	3.172	9.6	1567.8
DZO-35-10-053-A								
DZO-35-10-053-B	0.277	85.410	11.890	2.356	0.067	3.130	10.3	1452.8
DZO-35-10-054-B	0.392	80.649	15.990	2.884	0.085	3.691	12.4	1207.3
DZO-35-10-289-A	0.656	77.670	17.490	4.104	0.081	4.790	16.6	902.7
DZO-35-10-289-B	0.705	73.878	20.239	3.790	1.388	4.864	16.7	895.8
DZO-35-10-291-A								
DZO-35-10-291-B								
DZO-35-10-296-A	0.712	76.370	18.560	4.267	0.090	4.393	16.7	897.1
DZO-35-10-297-A	0.732	76.910	17.660	4.617	0.082	4.237	17.0	882.3
DZO-35-10-297-B	0.732	81.200	13.890	3.806	0.372	5.375	17.2	872.5
DZO-35-10-298-A	0.693	79.330	15.470	4.430	0.077	4.554	16.8	891.8
DZO-35-10-298-B	0.698	80.531	14.200	4.507	0.063	4.716	17.1	879.4
DZO-35-10-300-A	0.743	77.430	17.220	4.512	0.094	4.817	17.6	853.1
DZO-35-10-300-B	0.734	57.670	30.210	3.812	7.574	4.020	16.4	916.3
LAO-C**-226	0.062	81.586	16.590	1.410	0.352	0.100	4.8	3108.5
LAO-C**-227	0.070	81.809	16.400	1.370	0.351	0.106	4.8	3110.0
LAO-C**-228	0.058	82.254	16.000	1.360	0.328	0.095	4.7	3184.2
LAO-C**-229	0.058	82.033	16.200	1.370	0.339	0.081	4.7	3180.4
LAO-C**-230	0.056	82.109	16.160	1.320	0.355	0.061	4.6	3243.9
LAO-C**-231	0.060	81.656	16.490	1.430	0.364	0.068	4.8	3128.8
LAO-C**-232	0.055	82.009	16.210	1.380	0.346	0.086	4.7	3180.2
LAO-C**-233	0.058	81.984	16.240	1.380	0.338	0.071	4.7	3179.4
LAO-C**-234	0.067	81.980	16.250	1.360	0.343	0.085	4.8	3149.6
LAO-C**-242	0.060	82.072	16.190	1.340	0.338	0.136	4.8	3153.9
LA0-C**-245	0.062	81.876	16.360	1.350	0.352	0.144	4.8	3127.4
LAO-C**-247	0.059	81.940	16.360	1.300	0.335	0.128	4.7	3187.8
LAO-C**-259	0.061	81.898	16.360	1.340	0.341	0.112	4.7	3162.7
PBO-45-10-025	0.059	88.866	10.044	0.850	0.181	0.047	3.8	3962.8
PBO-45-11-032	0.112	84.129	13.397	2.086	0.276	0.006	5.6	2680.2
PBO-45-11-032C	0.105	84.770	12.928	1.923	0.275	0.133	5.5	2729.0
PBO-45-12-037	0.095	84.991	12.839	1.825	0.250	0.017	5.2	2889.0
PBO-45-12-038	0.115	84.824	12.687	2.114	0.260	0.009	5.6	2672.7
PBO-47-09-011	0.094	86.143	12.104	1.452	0.207	0.010	4.7	3176.8
PBO-47-09-011C	0.086	85.789	12.439	1.447	0.239	0.001	4.7	3208.6
PBO-47-09-012	0.091	86.137	12.107	1.458	0.207	0.008	4.7	3184.6
PBO-47-09-013	0.089	86.149	12.091	1.462	0.209	0.010	4.7	3188.8
** = 01 through 13								
Note: Because Pu transforms to Am the Wattage/gram value for Am-241 is used in place of the value for Pu-241.								

VAULT 1		
ITEMID	CAT	COEI
ARF-102-85-186-S	102	C02
ARF-102-85-199	102	C02
ARF-102-85-299	102	C01
ARF-102-85-307	102	C01
ARF-102-85-308-S	102	C01
ARF-102-85-309-S	102	C01
ARF-102-85-323	102	C01
ARF-102-85-332	102	C01
ARF-102-85-335	102	C01
ARF-102-85-357	102	C01
ARF-102-85-361	102	C01
ARF-102-85-364	102	C02
ARF-102-85-366	102	C01
ARF-102-85-374-1	51	C00
ARF-102-85-374-2	51	C00
ARF-102-85-381	102	C01
ARF-102-85-384	102	C01
ARF-102-85-396	102	C01
ARF-102-85-454	102	C01
ARF-102-85-538	102	C01
ARF-102-85-539	102	C01
ARF-102-85-868	102	C01
ARF-102-85-874	102	C01
ARF-102-85-875	102	C01
ARF-102-85-876	102	C01
ARF-102-85-879	102	C01
ARF-102-85-892	102	C01
ARF-102-85-904	102	C01
ARF-102-86-460	102	C01
ARF-102-86-493	102	C01
ARF-102-90-03	102	C01

VAULT 1		
ITEMID	CAT	COEI
41-79-11-1786	41	C01
41-79-11-1787	41	C01
41-79-11-1788	41	C01
41-85-08-1377	41	C01
41-85-08-1378	42	C01
41-85-08-1379	41	C01
41-87-06-251	41	C01
42-84-12-513	42	C01
42-85-03-544	42	C01
42-85-03-545	42	C01
42-86-06-509	42	C01
5-88-07-147	5	C00
5-88-08-195	5	C00
5-88-10-267	5	C00
5-88-10-268	5	C00
5-88-11-339	5	C00
51-78-06-518	51	C01
6-84-12-484	6	C01
6-84-12-548	6	C01
6-85-01-04	6	C01
6-85-01-05	6	C01
6-85-01-70	6	G00
6-85-01-73	6	C01
6-86-01-66	5	C01
61-82-09-65	61	C01
61-82-10-142	61	C01
61-82-12-565	61	C01
61-82-12-566	61	C01
61-82-12-567	61	C01
61-82-12-467	61	C01
61-83-01-018	61	C01

VAULT 1		
ITEMID	CAT	COEI
61-83-03-143	61	C00
61-83-03-144	61	C00
61-83-03-145	61	C00
61-83-03-146	61	C00
61-83-03-147	61	C00
61-83-03-148	61	C00
61-83-03-156	61	C00
61-83-04-199	61	C01
61-83-04-238	61	C01
61-83-08-568	61	C01
61-85-02-127	61	C01
61-85-03-338	61	C01
61-85-03-483	61	C01
61-85-04-629	61	C01
61-85-04-630	61	C01
61-85-05-650	61	C01
61-85-05-713	61	C01
61-85-05-714	61	C01
61-85-05-715	61	C01
61-85-05-716	61	C01
61-85-05-821	61	G00
61-85-06-940	61	C01
61-85-06-941	61	C01
61-85-06-942	61	C01
61-85-06-943	61	C01
61-85-06-950	61	C01
61-85-06-951	61	C01
61-85-06-991	61	C01
61-85-06-1009	61	G00
61-85-06-1010	61	C01
61-85-06-1011	61	C01

VAULT 1		
ITEMID	CAT	COEI
61-85-07-1018-1	61	C01
61-85-08-1266	61	C01
61-85-08-1298	61	C01
61-85-08-1299	61	C01
61-85-08-1326	61	C01
61-85-08-1327	61	C01
61-85-08-1328	61	C01
61-85-08-1332	61	C01
61-85-08-1344	61	C01
61-85-08-1360	61	C01
61-85-08-1365	61	C01
61-85-08-1366	61	C01
61-85-08-1382	61	C01
61-85-09-1383	61	C01
62-83-03-176	62	C00
62-85-03-324	62	C01
62-85-03-325	62	C01
62-85-08-1352	62	C01
62-85-09-1391	62	C01
62-85-09-1392	62	C01
62-85-09-1466	62	C01
62-85-10-1653	62	C01
62-86-02-82	62	C01
62-86-02-107	62	C01
62-86-02-125	62	C01
62-86-03-221	62	C01
62-86-03-247	62	C01
62-86-03-249	62	C01
62-87-03-189	62	C01
62-87-03-191	62	C01
62-87-09-301	62	C01

VAULT 1		
ITEMID	CAT	COEI
62-88-01-01	62	C01
63-85-02-161	63	C01
63-85-02-166	63	C01
63-85-02-175	63	C01
63-85-02-181	63	C01
63-85-02-182	63	C01
63-85-02-185	63	C01
63-85-02-190	63	C01
63-85-02-192	63	C01
63-85-02-196	63	C01
63-85-02-197	63	C01
63-85-03-257	63	C01
63-85-03-269	63	C01
63-85-03-319	63	C01
63-85-03-320	63	C01
63-85-03-321	63	C01
63-85-03-332-1	63	C01
63-85-04-595	63	C01
63-85-04-582	63	C01
63-85-04-573	63	C01
63-87-07-259	63	C01
63-87-08-275	63	C01
63-87-08-276	63	C01
63-87-08-277	63	C01
63-87-08-284	63	C01
63-87-12-341	63	C01
63-88-01-22	63	C01
63-88-05-90	63	C01
63-88-05-92	63	C01
63-88-05-93	63	C01
63-88-06-100	63	C01

VAULT 1		
ITEMID	CAT	COEI
63-88-06-102	63	C01
63-88-06-105	63	C01
63-88-06-106	63	C01
63-88-06-112	63	C01
63-88-06-113	63	C01
63-88-06-121	63	C01
63-88-06-122	63	C01
63-88-06-124	63	C01
63-88-07-128	63	C01
63-88-07-130	63	C01
63-88-07-131	63	C01
63-88-08-194-1	63	C01
63-88-08-194-2	63	C01
63-88-08-204	63	C01
63-88-08-206	63	C01
63-88-09-218	63	C01
63-88-09-219	63	C01
63-88-09-220	63	C01
63-88-09-231	63	C02
63-88-09-232	63	C02
63-88-09-233	63	C02
63-88-09-234	63	C02
63-88-10-264	63	C00
63-88-10-265	63	C00
63-88-10-266	63	C00
63-88-10-273	63	C01
63-88-10-274	63	C01
63-88-10-283	63	C01
63-88-10-281	63	C01
63-88-10-282	63	C01
63-88-10-284	63	C01

VAULT 1		
ITEMID	CAT	COEI
63-88-10-298	63	C01
63-88-11-345	63	C01
63-88-11-347	63	C01
63-88-12-369	63	C01
63-88-12-370	63	C01
63-88-12-374	63	C01
63-88-12-375	63	C01
64-85-10-1593	64	C01
64-85-10-1594	64	C01
64-85-10-1629	64	C01
64-85-10-1569	64	C01
64-85-11-1686	64	C01
64-85-11-1688	64	C01
64-85-11-1745	64	C01
64-85-11-1746	64	C01
64-85-11-1752	64	C01
64-85-11-1762	64	C01
64-85-11-1763	64	C01
64-85-11-1764	64	C01
64-85-11-1765	64	C01
64-85-11-1784	64	C01
64-85-11-1785	64	C01
64-85-11-1790	64	C01
64-85-12-1912	64	C01
64-86-02-154	64	C01
64-86-02-155	64	C01
64-86-03-233	64	C01
64-86-03-234	64	C01
64-86-03-203	64	C01
64-86-03-207	64	C01
64-86-03-231	64	C01

VAULT 1		
ITEMID	CAT	COEI
64-86-03-235	64	C01
64-86-03-236	64	C01
64-86-04-298	64	C01
64-86-04-311	64	C01
64-86-05-378	64	C01
64-86-05-452	64	C01
64-86-05-495	64	C01
64-86-07-580	64	C01
64-86-07-631	64	C01
64-86-07-632	64	C01
64-86-07-633	64	C01
64-86-08-729	64	C01
64-86-08-740	64	C01
64-87-04-217	64	C01
64-87-04-226	64	C01
64-87-05-248	64	C01
64-87-06-252	64	C01
64-87-09-293	64	C01
64-87-09-294	64	C01
64-87-09-295	64	C01
64-87-11-336	64	C01
64-88-01-14	64	C01
64-88-01-16	64	C01
64-88-01-20	64	C01
64-88-01-21	64	C01
64-88-02-28-1	64	C01
64-88-02-28-2	64	C01
64-88-02-29	64	C01
64-88-03-62-1	64	C01
64-88-03-62-2	64	C01
64-88-05-89	64	C01

VAULT 1		
ITEMID	CAT	COEI
64-88-08-181	64	C01
64-88-08-191	64	C01
63-88-11-327	64	C01
63-88-11-330	64	C01
67-77-03-308	67	C01
67-77-03-309	67	C01
67-77-03-310	67	C01
67-77-03-311	67	C01
67-77-03-312	67	C01
67-77-03-313	67	C01
67-77-03-314	67	C01
67-77-03-316	67	C01
67-77-03-317	67	C01
67-77-03-318	67	C01
67-77-03-319	67	C01
67-77-03-320	67	C01
74-88-12-367	74	C01
16-X-5-6	850	771
83-X-2-16	850	771
204-X-284-12	850	771
STD-208-X-100-6	850	771
209-X-249-6	850	771
214-X-25-8	850	771
215-X-50-8	850	771
217-X-247-8	850	771
222-X-025-10	850	771
STD-225-X-243-10	850	771
STD-259-X-168-24	850	771
230-X-23-12	850	771
232-X-101-12	850	771
261-X-221-12	850	771

VAULT 1		
ITEMID	CAT	COEI
GE-QC-10	850	771
GE-QC-14	850	771
GE-QC-17	850	771
GE-QC-18	850	771
GE-QC-20	850	771
GE-QC-21	850	771
GE-QC-22	850	771
GE-QC-23	850	771
GE-QC-24	850	771
GE-QC-25	850	771
GE-QC-26	850	771
PPSL-183	51	C02
QC-14	850	771
QC-15	850	771
QC-96-09-001	850	771
TD-1B	51	C01
TD-2	51	C01
XDT-148-81-12	148	455
YEB-474-77-01-04	474	C01
YEB-474-77-01-05	474	C01
YEC-36-01-023	175	454
YDZ-36-10-01	175	455
YDZ-36-10-02	175	455
YUD-148-81-07	148	455
YUD-148-81-08-01	148	455
YUD-148-81-09	148	455
YUD-148-81-10	148	455
BLO-38-11-004	145	771
BLO-38-11-010	145	771
BLO-39-10-17-007	114	454
BLO-39-10-17-008	114	454

VAULT 1		
ITEMID	CAT	COEI
BLO-39-10-17-009	114	454
BLO-39-10-17-010	114	454
BLO-39-10-17-011	114	454
BLO-39-10-17-012	114	454
BLO-39-10-17-013	114	454
BLO-39-11-05-004	114	454
DZO-35-10-043-A	175	454
LAO-C10-234	112	454
LAO-C10-242	112	454
LAO-C10-245	112	454
LAO-C10-247	112	454
LAO-C10-259	112	454
PBO-47-09-011-015	173	454
PBO-47-09-011-028	173	454
PBO-47-09-012-024	173	454
PBO-47-09-012-025	173	454
PBO-47-09-012-026	173	454
PBO-47-09-013-004	173	454
PBO-47-09-013-006	173	454
PBO-47-09-013-007	173	454
PBO-47-09-013-008	173	454

VAULT 2		
ITEMID	CAT	COEI
A-28-1-37	111	746
AM-3H-01 SWEEP	849	C01
AO-31-28 SWEEP	849	C01
ARF-102-86-600	102	C01
AS-31H-57 SWEEP	849	C01
CAF-482-75-47-2	482	C30
CE-5-203-8	74	C30
CE-6-265-8	74	G00

VAULT 2		
ITEMID	CAT	COEI
CZA-465-72-08	465	C01
CZA-465-72-23	465	C01
CZA-465-72-24	465	C01
CZA-465-72-25	465	C01
CZA-469-74-228	455	C01
EAB-3-2-1 PART	67	C01
EF-1-S SWEEPS	849	C01
GEO-30-08-001	20	C01
GE-QC-27	850	771
HUA-40-10-01	148	454
HUA-40-10-02	148	454
HUA-40-10-03	148	454
HUA-40-10-04	148	454
S-22S-2	52	C01
ZLS-588-75-81	850	771
102-F-200-6	850	771
110-XS-38-6	850	771
104-XS-5-6	850	771
108-XS-25-6	850	771
145-174-X-7-6	850	771
19B14-A	175	C01
20-74-07-495	20	C01
STD-207-X-50-6	850	771
216-X-100-8	850	771
223-X-50-10	850	771
224-X-100-10	850	771
231-X-51-12	850	771
240-N-1-12	850	771
241-N-2-12	850	771
242-N-1-12	850	771
243-N-5-12	850	771

VAULT 2		
ITEMID	CAT	COEI
244-N-7-12	850	771
245-N-10-12	850	771
251M-200-2	850	771
253M-212-8	850	771
254M-191-12	850	771
256M-161-22	850	771
263-N-2-8	850	771
265-N-5-8	850	771
266-N-7-8	850	771
39-XA-100-6	850	771
40-XA-150-6	850	771
41-85-08-1381	41	C01
42-86-07-625	42	C01
42-86-08-707	42	C01
42-86-08-743	42	C01
451-83-09-841	451	781
5-85-11-1726	5	C01
60-184-1	73	E04
64-86-08-725	64	C01
64-86-08-727	64	C01
64-86-09-760	64	C01
64-86-09-775	64	C01
64-86-09-776	64	C01
64-86-09-789	64	C01
64-86-09-791	64	C01
64-86-09-792	64	C01
67-74-07-485	67	C03
84-X-2-16	850	771
85-X-2-16	850	771
86-X-2-16	850	771
87-X-2-16	850	771

VAULT 2		
ITEMID	CAT	COEI
88-X-2-16	850	771
89-X-2-16	850	771
90-X-2-16	850	771
91-X-2-16	850	771
92-X-2-16	850	771
90-75-08-677	91	C01
90-75-08-680	91	C01
90-75-08-687	91	C01
LAO-C09-226	112	454
LAO-C10-226	112	454
LAO-C11-226	112	454
LAO-C03-227	112	454
LAO-C04-227	112	454
LAO-C05-227	112	454
LAO-C06-227	112	454
LAO-C07-227	112	454
LAO-C08-227	112	454
LAO-C09-227	112	454
LAO-C10-227	112	454
LAO-C11-227	112	454
LAO-C12-227	112	454
LAO-C03-228	112	454
LAO-C04-228	112	454
LAO-C05-228	112	454
LAO-C06-228	112	454
LAO-C07-228	112	454
LAO-C08-228	112	454
LAO-C09-228	112	454
LAO-C11-228	112	454
LAO-C12-228	112	454
LAO-C13-228	112	454

VAULT 2		
ITEMID	CAT	COEI
LAO-C01-229	112	454
LAO-C03-229	112	454
LAO-C04-229	112	454
LAO-C05-229	112	454
LAO-C06-229	112	454
LAO-C07-229	112	454
LAO-C08-229	112	454
LAO-C02-230	112	454
LAO-C03-230	112	454
LAO-C04-230	112	454
LAO-C05-230	112	454
LAO-C06-230	112	454
LAO-C07-230	112	454
LAO-C08-230	112	454
LAO-C09-230	112	454
LAO-C02-231	112	454
LAO-C03-231	112	454
LAO-C04-231	112	454
LAO-C05-231	112	454
LAO-C06-231	112	454
LAO-C07-231	112	454
LAO-C08-231	112	454
LAO-C09-231	112	454
LAO-C11-231	112	454
LAO-C12-231	112	454
LAO-C13-231	112	454
LAO-C02-232	112	454
LAO-C03-232	112	454
LAO-C04-232	112	454
LAO-C06-232	112	454
LAO-C07-232	112	454

VAULT 2		
ITEMID	CAT	COEI
LAO-C02-233	112	454
LAO-C03-233	112	454
LAO-C04-233	112	454
LAO-C05-233	112	454
LAO-C06-233	112	454

VAULT 4		
ITEMID	CAT	COEI
10-89-07-84	10	C01
10-89-07-88	10	C01
22260	112	454
22277	112	454
41A	51	C00
41B	51	C00
41-89-05-36	41	G05
41-89-05-37	41	G05
41-89-05-38	41	G05
41-89-05-39	41	G05
41-89-07-44	41	G05
41-89-07-45	41	G05
42-87-02-26	42	G05
61-85-04-580	5	C01
61-85-08-1222	5	C01
61-85-08-1223	5	C01
6-85-01-46	6	C01
6-85-01-85	6	C01
6-85-02-131	6	C01
61-84-10-335	61	C01
61-84-10-339	61	C01
61-84-10-389	61	C01
61-85-03-331	61	C01
61-85-03-336	61	C01

VAULT 4		
ITEMID	CAT	COEI
61-85-03-337	61	C01
61-85-03-339	61	C01
61-85-03-482	61	C01
61-85-03-484	61	C01
61-85-03-533	61	C01
61-85-03-543	61	C01
61-85-04-581	61	C01
61-85-04-613	61	C01
61-85-04-614	61	C01
61-85-04-622	61	C01
61-85-05-643	61	C01
61-85-05-644	61	C01
61-85-05-645	61	C01
61-85-05-651	61	C01
61-85-05-652	61	C01
61-85-05-820	61	C01
61-85-06-953	61	C01
61-85-07-1018-2	61	C01
61-85-07-1019	61	C01
61-85-07-1020	61	C01
61-85-07-1028	61	C01
61-85-07-1029	61	C01
61-85-07-1030	61	C01
61-85-07-1031	61	C01
61-85-07-1053	61	C01
61-85-07-1054	61	C01
61-85-07-1055	61	C01
61-85-07-1056	61	C01
61-85-07-1057	61	C01
61-85-07-1058	61	C01
61-85-07-1059	61	C01

VAULT 4		
ITEMID	CAT	COEI
61-85-07-1060	61	C01
61-85-07-1061	61	G00
61-85-07-1137	61	C01
61-85-07-1138	61	C01
61-85-07-1139	61	C01
61-85-07-1140	61	C01
61-85-07-1141	61	C01
61-85-07-1142	61	C01
61-85-07-1143	61	C01
61-85-07-1144	61	C01
61-85-07-1145	61	C01
61-85-07-1146	61	C01
61-85-07-1147	61	C01
61-85-07-1148	61	C01
61-85-07-2000	61	C01
61-85-07-2001	61	C01
61-85-07-2002	61	C01
61-85-07-2003	61	C01
61-85-08-1189	61	C01
61-85-08-1190	61	C01
61-85-08-1191	61	C01
61-85-08-1192	61	C01
61-85-08-1205	61	C01
61-85-08-1206	61	C01
61-85-08-1207	61	C01
61-85-08-1224	61	C01
61-85-08-1232	61	C01
61-85-08-1233	61	C01
61-85-08-1234	61	C01
61-85-08-1235	61	C01
61-85-08-1236	61	C01

VAULT 4		
ITEMID	CAT	COEI
61-85-08-1237	61	C01
61-85-08-1238	61	C01
61-85-08-1245	61	C01
61-85-08-1246	61	C01
61-85-08-1247	61	C01
61-85-08-1248	61	C01
61-85-08-1264	61	C01
61-85-08-1265	61	C01
61-85-08-1267	61	C01
61-85-08-1276	61	C01
61-85-08-1277	61	C01
61-85-08-1278	61	C01
61-85-08-1296	61	C01
61-85-08-1297	61	C01
61-85-08-1318	61	C01
61-85-08-1319	61	C01
61-85-08-1320	61	C01
61-85-08-1321	61	C01
61-85-08-1329	61	C01
61-85-08-1330	61	C01
61-85-08-1331	61	C01
61-85-08-1333	61	C01
61-85-08-1342	61	C01
61-85-08-1343	61	C01
61-85-08-1345	61	C01
61-85-08-1358	61	C01
61-85-08-1359	61	C01
61-85-08-1361	61	C01
61-85-08-1367	61	C01
61-85-08-1368	61	C01
61-85-08-1369	61	C01

VAULT 4		
ITEMID	CAT	COEI
61-85-08-1370	61	C01
61-85-08-1371	61	C01
62-83-06-363	62	C00
62-85-06-960	62	C01
62-85-09-1384	62	C01
62-85-09-1386	62	C01
62-85-09-1393	62	C01
62-85-11-1795	62	C01
62-85-12-1829	62	C01
62-86-03-205	62	C01
62-86-03-220	62	C01
62-87-03-64	62	C01
62-87-10-325	62	C01
61-85-03-332-2	63	C01
63-85-04-612	63	C01
63-87-02-56	63	C01
63-87-03-66	63	C01
63-87-03-67	63	C01
63-87-03-92	63	C01
63-87-08-278	63	C01
63-87-08-283	63	C01
63-87-10-327	63	C01
64-86-12-1029	63	C01
64-85-10-1545	64	C01
64-85-10-1561	64	C01
64-85-10-1570	64	C01
64-85-10-1579	64	C01
64-85-10-1588	64	C01
64-85-12-1830	64	C01
64-85-12-1858	64	C01
64-85-12-1859	64	C01

VAULT 4		
ITEMID	CAT	COEI
64-85-12-1860-1	64	C01
64-85-12-1860-2	64	C01
64-85-12-1861	64	C01
64-85-12-1871	64	C01
64-85-12-1872	64	C01
64-85-12-1873	64	C01
64-85-12-1874	64	C01
64-85-12-1884	64	C01
64-85-12-1885	64	C01
64-86-03-206	64	C01
64-86-04-299	64	C01
64-86-05-376	64	C01
64-86-09-814	64	C01
64-86-09-817	64	C01
64-86-10-850	64	C01
64-86-10-851	64	C01
64-87-03-154	64	C01
64-95-02-08	64	C02
64-95-02-21	64	C02
64-95-06-153	64	C02
64-95-09-216	64	C02
64-95-09-217	64	C02
64-95-10-220	64	C02
64-96-01-014	64	C02
64-96-01-015	64	C02
64-96-05-214	64	C02
ACO-29-12-001 S	145	771
B707	51	C00
CZA-001	41	G05
CZA-001	148	454
GE-QC-7	850	771

VAULT 4		
ITEMID	CAT	COEI
GE-QC-8	850	771
GE-QC-9	850	771
GES-33-06-001	175	454
K412	51	C00
NX-29-02-S63-31	145	771
NX-29-02-S63-32	145	771
NX-29-03-S56-27	145	771
NX-29-03-S56-28	145	771
NX-29-03-S56-29	145	771
O-30-03-4-5	145	771
O-30-09-001 C	145	771
WBO-30-10-1-2	145	771
ZPS-28-09-049-40-A	145	771
ZPS-28-12-019-19	145	771
ZYP-30-09-001-0001	145	771
ZYP-30-09-001-0002	145	771
PPSL-102	51	C00
PPSL-103	51	C00
PPSL-104	51	C00
PPSL-225	51	C01
BLO-39-10-021-002	114	454
BLO-39-10-021-003	114	454
BLO-39-10-021-004	114	454
BLO-39-10-021-005	114	454
BLO-39-10-021-006	114	454
BLO-39-10-021-007	114	454
BLO-39-10-021-008	114	454
BLO-39-10-021-009	114	454
BLO-39-10-021-010	114	454
BLO-39-10-021-011	114	454
BLO-39-10-16-011	114	454

VAULT 4		
ITEMID	CAT	COEI
BLO-39-10-16-012	114	454
BLO-39-10-18-001	114	454
BLO-39-10-18-002	114	454
BLO-39-10-18-003	114	454
BLO-39-10-18-004	114	454
BLO-39-10-18-005	114	454
BLO-39-10-18-006	114	454
BLO-39-10-18-007	114	454
BLO-39-10-18-009	114	454
BLO-39-10-19-001	114	454
BLO-39-10-19-003	114	454
BLO-39-10-19-005	114	454
BLO-39-10-19-009	114	454
BLO-39-10-19-012	114	454
BLO-39-10-20-001	114	454
BLO-39-10-20-003	114	454
BLO-39-10-20-005	114	454
BLO-39-10-20-006	114	454
BLO-39-10-20-007	114	454
BLO-39-10-20-010	114	454
BLO-39-10-20-011	114	454
BLO-39-10-20-012	114	454
BLO-39-11-01-003	114	454
BLO-39-11-01-004	114	454
BLO-39-11-01-005	114	454
BLO-39-11-01-007	114	454
BLO-39-11-01-008	114	454
BLO-39-11-01-012	114	454
BLO-39-11-01-013	114	454
BLO-39-11-01-014	114	454
BLO-39-11-02-002	114	454

VAULT 4		
ITEMID	CAT	COEI
BLO-39-11-02-003	114	454
BLO-39-11-02-005	114	454
BLO-39-11-02-007	114	454
BLO-39-11-02-009	114	454
BLO-39-11-02-010	114	454
BLO-39-11-02-011	114	454
BLO-39-11-02-012	114	454
BLO-39-11-02-013	114	454
BLO-39-11-02-014	114	454
BLO-39-11-03-001	114	454
BLO-39-11-03-002	114	454
BLO-39-11-03-003	114	454
BLO-39-11-03-004	114	454
BLO-39-11-03-005	114	454
BLO-39-11-03-006	114	454
BLO-39-11-03-007	114	454
BLO-39-11-03-008	114	454
BLO-39-11-03-009	114	454
BLO-39-11-03-010	114	454
BLO-39-11-03-011	114	454
BLO-39-11-03-012	114	454
BLO-39-11-03-013	114	454
BLO-39-11-03-014	114	454
BLO-39-11-04-001	114	454
BLO-39-11-04-002	114	454
BLO-39-11-04-003	114	454
BLO-39-11-04-004	114	454
BLO-39-11-04-005	114	454
BLO-39-11-04-006	114	454
BLO-39-11-04-007	114	454
BLO-39-11-04-008	114	454

VAULT 4		
ITEMID	CAT	COEI
BLO-39-11-04-009	114	454
BLO-39-11-04-010	114	454
BLO-39-11-04-011	114	454
BLO-39-11-04-012	114	454
BLO-39-11-04-013	114	454
BLO-39-11-04-014	114	454
BLO-39-11-05-001	114	454
BLO-39-11-05-002	114	454
BLO-39-11-05-003	114	454
BLO-39-11-05-004	114	454
BLO-39-11-05-005	114	454
BLO-39-11-05-006	114	454
BLO-39-11-05-007	114	454
BLO-39-11-05-008	114	454
BLO-39-11-05-009	114	454
BLO-39-11-05-010	114	454
BLO-39-11-05-011	114	454
BLO-39-11-05-012	114	454
BLO-39-11-05-013	114	454
BLO-39-11-06-001	114	454
BLO-39-11-06-002	114	454
BLO-39-11-06-003	114	454
BLO-39-11-06-004	114	454
BLO-39-11-06-005	114	454
BLO-39-11-06-006	114	454
BLO-39-11-06-007	114	454
BLO-39-11-06-008	114	454
BLO-39-11-06-009	114	454
BLO-39-11-06-010	114	454
BLO-39-11-06-011	114	454
BLO-39-11-06-012	114	454

VAULT 4		
ITEMID	CAT	COEI
BLO-39-11-06-013	114	454
BLO-39-11-06-014	114	454
BLO-39-11-07-001	114	454
BLO-39-11-07-002	114	454
BLO-39-11-07-003	114	454
BLO-39-11-07-004	114	454
BLO-39-11-07-005	114	454
BLO-39-11-07-006	114	454
BLO-39-11-07-007	114	454
BLO-39-11-07-008	114	454
BLO-39-11-07-009	114	454
BLO-39-11-07-010	114	454
BLO-39-11-08-006	114	454
BLO-39-11-08-009	114	454
BLO-39-11-08-010	114	454
BLO-39-11-08-011	114	454
BLO-39-11-08-012	114	454
BLO-39-11-08-013	114	454
BLO-39-11-08-014	114	454
BLO-39-11-09-001	114	454
BLO-39-11-09-002	114	454
BLO-39-11-09-003	114	454
BLO-39-11-09-004	114	454
BLO-39-11-09-006	114	454
BLO-39-11-09-007	114	454
BLO-39-11-09-008	114	454
BLO-39-11-09-009	114	454
BLO-39-11-09-010	114	454
BLO-39-11-09-011	114	454
BLO-39-11-09-012	114	454
BLO-39-11-09-013	114	454

VAULT 4		
ITEMID	CAT	COEI
BLO-39-11-10-001	114	454
BLO-39-11-10-002	114	454
BLO-39-11-10-003	114	454
BLO-39-11-10-004	114	454
BLO-39-11-10-005	114	454
BLO-39-11-10-006	114	454
BLO-39-11-10-007	114	454
BLO-39-11-10-008	114	454
BLO-39-11-10-009	114	454
BLO-39-11-10-010	114	454
BLO-39-11-10-011	114	454
BLO-39-11-10-012	114	454
BLO-39-11-11-001	114	454
BLO-39-11-11-002	114	454
BLO-39-11-11-003	114	454
BLO-39-11-11-004	114	454
BLO-39-11-11-005	114	454
BLO-39-11-11-006	114	454
BLO-39-11-11-007	114	454
BLO-39-11-11-008	114	454
BLO-39-11-11-009	114	454
BLO-39-11-11-010	114	454
BLO-39-11-11-011	114	454
BLO-39-11-11-012	114	454
BLO-39-11-11-013	114	454
BLO-39-11-11-014	114	454
BLO-39-11-12-001	114	454
BLO-39-11-12-002	114	454
BLO-39-11-12-003	114	454
BLO-39-11-12-004	114	454
BLO-39-11-12-005	114	454

VAULT 4		
ITEMID	CAT	COEI
BLO-39-11-12-006	114	454
BLO-39-11-12-007	114	454
BLO-39-11-12-008	114	454
BLO-39-11-12-009	114	454
BLO-39-11-12-010	114	454
BLO-39-11-12-011	114	454
BLO-39-11-12-012	114	454
BLO-39-11-12-013	114	454
BLO-39-11-13-001	114	454
BLO-39-11-13-002	114	454
BLO-39-11-13-003	114	454
BLO-39-11-13-004	114	454
BLO-39-11-13-005	114	454
BLO-39-11-13-006	114	454
BLO-39-11-13-007	114	454
BLO-39-11-13-008	114	454
BLO-39-11-13-009	114	454
BLO-39-11-13-010	114	454
BLO-39-11-13-011	114	454
BLO-39-11-13-012	114	454
BLO-39-11-13-013	114	454
BLO-39-11-14-001	114	454
BLO-39-11-14-002	114	454
BLO-39-11-14-003	114	454
BLO-39-11-14-005	114	454
BLO-39-11-14-006	114	454
BLO-39-11-14-007	114	454
BLO-39-11-14-008	114	454
BLO-39-11-14-009	114	454
BLO-39-11-14-010	114	454
BLO-39-11-14-011	114	454

VAULT 4		
ITEMID	CAT	COEI
BLO-39-11-14-012	114	454
BLO-39-11-14-013	114	454
BLO-39-11-14-014	114	454
BLO-39-11-15-001	114	454
BLO-39-11-15-002	114	454
BLO-39-11-15-003	114	454
BLO-39-11-15-004	114	454
BLO-39-11-16-001	114	454
BLO-39-11-16-002	114	454
BLO-39-11-16-003	114	454
BLO-39-11-16-007	114	454
BLO-39-11-16-008	114	454
BLO-39-11-16-010	114	454
BLO-39-11-17-001	114	454
BLO-39-11-17-002	114	454
BLO-39-11-17-003	114	454
BLO-39-11-17-004	114	454
BLO=39-11-17-005	114	454
BLO-39-11-17-006	114	454
BLO-39-11-17-007	114	454
BLO-39-11-17-008	114	454
BLO-39-11-17-009	114	454
BLO-39-11-17-010	114	454
BLO-39-11-17-011	114	454
BLO-39-11-17-012	114	454
BLO-39-11-17-013	114	454
BLO-39-11-17-014	114	454
BLO-39-11-17-015	114	454
BO-28-01-001-04	150	454
BO-28-01-001-05	150	454
BO-28-01-001-06	150	454

VAULT 4		
ITEMID	CAT	COEI
BO-28-01-001-07	150	454
BO-28-01-002-04	150	454
BO-29-02-S63-30	150	454
BO-29-03-058-B	150	454
BO-30-10-001-A	150	454
BO-30-10-001-B	150	454
BO-30-10-002-B	150	454
BO-30-10-003-A	150	454
BO-30-10-003-B	150	454
BO-30-10-004-B	150	454
BO-30-10-005-1	150	454
BO-30-10-005-2	150	454
BO-30-10-006-1	150	454
BO-30-10-006-2	150	454
BO-30-10-007-1	150	454
BO-30-10-007-2	150	454
BO-30-10-008-1	150	454
BO-30-10-008-2	150	454
BO-30-11-012-1	150	454
BO-30-11-012-2	150	454
BO-30-11-013-1	150	454
BO-30-11-013-2	150	454
BO-30-11-014	150	454
BO-30-11-043-1	150	454
BO-30-11-043-2	150	454
BO-30-11-044-1	150	454
BO-30-11-044-2	150	454
BO-30-11-045-1	150	454
BO-30-11-045-2	150	454
BO-30-11-046-1	150	454
BO-30-11-046-2	150	454

VAULT 4		
ITEMID	CAT	COEI
BO-30-11-047-1	150	454
BO-30-11-047-2	150	454
BO-30-11-047-3	150	454
BO-30-11-048-1	150	454
BO-30-11-048-2	150	454
BO-30-11-049	150	454
BO-30-11-11-1	150	454
BO-30-11-11-2	150	454
BO-30-11-11-3	150	454
DZO-35-09-002	175	454
DZO-35-09-003	175	454
DZO-35-09-004	175	454
DZO-35-09-005	175	454
DZO-35-09-006	175	454
DZO-35-09-007	175	454
DZO-35-09-008	175	454
DZO-35-09-009	175	454
DZO-35-09-010	175	454
DZO-35-09-011	175	454
DZO-35-09-013	175	454
DZO-35-09-015	175	454
DZO-35-09-016	175	454
DZO-35-09-019	175	454
DZO-35-09-020	175	454
DZO-35-09-021	175	454
DZO-35-09-022	175	454
DZO-35-09-023	175	454
DZO-35-09-024	175	454
DZO-35-09-025	175	454
DZO-35-09-026	175	454
DZO-35-09-027	175	454

VAULT 4		
ITEMID	CAT	COEI
DZO-35-09-028	175	454
DZO-35-09-029	175	454
DZO-35-09-030	175	454
DZO-35-09-031	175	454
DZO-35-09-032	175	454
DZO-35-09-033	175	454
DZO-35-09-034	175	454
DZO-35-09-035	175	454
DZO-35-09-036	175	454
DZO-35-09-037	175	454
DZO-35-09-038	175	454
DZO-35-09-039	175	454
DZO-35-09-040	175	454
DZO-35-09-041	175	454
DZO-35-09-042	175	454
DZO-35-09-043	175	454
DZO-35-09-044	175	454
DZO-35-09-045	175	454
DZO-35-09-046	175	454
DZO-35-09-047	175	454
DZO-35-09-048	175	454
DZO-35-09-049	175	454
DZO-35-09-050	175	454
DZO-35-09-051	175	454
DZO-35-09-052	175	454
DZO-35-09-053	175	454
DZO-35-09-054	175	454
DZO-35-09-055	175	454
DZO-35-09-056	175	454
DZO-35-09-057	175	454
DZO-35-09-058	175	454

VAULT 4		
ITEMID	CAT	COEI
DZO-35-09-059	175	454
DZO-35-09-060	175	454
DZO-35-09-061	175	454
DZO-35-09-062	175	454
DZO-35-09-063	175	454
DZO-35-09-064	175	454
DZO-35-09-065	175	454
DZO-35-09-066	175	454
DZO-35-09-067	175	454
DZO-35-09-068	175	454
DZO-35-09-069	175	454
DZO-35-09-070	175	454
DZO-35-09-071	175	454
DZO-35-09-072	175	454
DZO-35-09-073	175	454
DZO-35-09-074	175	454
DZO-35-09-075	175	454
DZO-35-09-076	175	454
DZO-35-09-077	175	454
DZO-35-09-078	175	454
DZO-35-09-079	175	454
DZO-35-09-080	175	454
DZO-35-09-081	175	454
DZO-35-09-082	175	454
DZO-35-09-287-A	150	454
DZO-35-09-287-B	150	454
DZO-35-09-294-A	150	454
DZO-35-09-294-B	150	454
DZO-35-09-295-A	150	454
DZO-35-09-295-B	150	454
DZO-35-09-301-A	150	454

VAULT 4		
ITEMID	CAT	COEI
DZO-35-09-301-B	150	454
DZO-35-09-302-A	150	454
DZO-35-09-302-B	150	454
DZO-35-09-303-A	150	454
DZO-35-09-303-B	150	454
DZO-35-10-025-A	175	454
DZO-35-10-026-A	175	454
DZO-35-10-027-A	175	454
DZO-35-10-028-A	175	454
DZO-35-10-053-A	175	454
DZO-35-10-053-B	175	454
DZO-35-10-054-B	175	454
DZO-35-10-289-A	150	454
DZO-35-10-289-B	150	454
DZO-35-10-291-A	150	454
DZO-35-10-291-B	150	454
DZO-35-10-296-A	150	454
DZO-35-10-297-A	150	454
DZO-35-10-297-B	150	454
DZO-35-10-298-A	150	454
DZO-35-10-298-B	150	454
DZO-35-10-300-A	150	454
LAO-C02-251	112	454
LAO-C03-245	112	454
LAO-C04-253	112	454
LAO-C05-246	112	454
LAO-C06-253	112	454
LAO-C08-248	112	454
PBO-45-12-038-021	173	454
PBO-45-12-038-027	173	454

ITEMID	CAT	COEI
41-85-07-1106	41	C02
41-87-06-250	41	C01
42-92-01-01-A	42	C00
42-92-01-01-B	42	C00
42-92-01-03	42	C00
42-94-11-89	42	C00
64-85-10-1596	64	C01
64-86-10-752	64	C01
64-96-01-017	64	C02
839997	850	746
88-83-06-319-1	111	771
B02577/B02578	74	746
B02579/B02580	74	746
B02581/B02582	73	746
B02583/B02584	73	746
B02585/B02586	73	746
B02587/B02588	73	746
B3039	5	771
B3040	5	771
DZO-35-09-001	175	G01
DZO-35-09-001A	175	G01
PPSL-394	51	C02
PPSL-400	51	C02
RA142	73	G00
RA146-1B	73	G00
RA146C	73	G00
YEC-32-03-001-09	175	G01

Vault 225		
ITEMID	CAT	COEI
1-X-1-6	850	771
2-X-1-6	850	771
3-X-1-6	850	771
4-X-1-6	850	771
5-X-1-6	850	771
17-X-5-6	850	771

Vault 225		
ITEMID	CAT	COEI
18-X-5-6	850	771
19-X-5-6	850	771
20-X-5-6	850	771
24-X-25-10	850	771
25-X-50-10	850	771
26-X-100-10	850	771
37-XA-25-6	850	771
38-XA-50-6	850	771
177-XA-9-8	850	771
178-XA-35-8	850	771
179-XA-9-12	850	771
180-XA-35-12	850	771
181-XA-1-12	850	771
182-XA-9-23	850	771
183-XA-35-23	850	771
124-XS-11-8	850	771
125-XS-20-8	850	771
126-XS-31-8	850	771
127-XS-40-8	850	771
128-XS-51-8	850	771
129-XS-11-11	850	771
130-XS-20-11	850	771
132-XS-40-11	850	771
42-92-01-05	42	C00

Vault 192C		
ITEMID	CAT	COEI
6-X-1-6	850	771
7-X-1-6	850	771
8-X-1-6	850	771
9-X-1-6	850	771
10-X-1-6	850	771
11-X-5-6	850	771
12-X-5-6	850	771
13-X-5-6	850	771

Vault 192C		
ITEMID	CAT	COEI
14-X-5-6	850	771
15-X-5-6	850	771
5-88-01-12	5	G05

DISTRIBUTION SHEET

To	From	Page 1 of 1
Distribution	PFP Process Engineering	Date April 19, 2000
Project Title/Work Order		EDT No. N/A
THERMAL STABILIZATION BLEND PLAN		ECN No. 657095

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
R. A. Burk	T4-20	X			
J. F. Durnil	T5-55	X			
G. E. Hickman Jr.	T5-09	X			
K. A. Larkin	T5-55	X			
N. E. Wilkins	T5-55	X			
A. L. Ramble	T5-53	X			
H. R. Risenmay	T5-55	X			
R. D. Redekopp	T5-15	X			
W. F. Russell Jr.	T5-51	X			
B. D. Skeels	T5-09	X			
D. R. Speer	T5-50	X			
A. M. Stubbs	T5-55	X			
R. W. Szempruch	T5-55	X			
M. D. Talbot	T5-15	X			
Central Files	B1-07	X			