Y-12 NATIONAL SECURITY COMPLEX
ENRICHED URANIUM DECLARATION REQUEST

1. DECLARATION REQUEST FOR:	X	SCRAP		STORAGE	2. DECLARATION NUMBER:	ZVS-2019-001

SECTION I (Items 1-6) - FOR USE BY SHIPPING SITE

INSTRUCTIONS

* Please identify if this declaration is submitted as "scrap" or "storage" by placing an "X" in the appropriate box for Item 1. A scrap or storage declaration is comprised of all the completed forms in this document.
* Please assign a Declaration Number to this document. The Declaration Number assigned in Item 2 should be carried forward to all forms in this document. A Declaration Number is generally comprised of the shipping site's three letter RIS, the calendar year the declaration is submitted, and a three digit number to identify the chronological/sequential numbering for declarations submitted for the calendar year. An example of the Declaration Number in the correct format is FZF-2019-001.
* A declaration request should be comprised of materials that are of the same material form and constituents.
* It is imperative that a complete and concise description of both the material and packaging be furnished with each declaration request. If the material requires repackaging prior to shipment, please provide as much packaging information as possible based on the packaging plan for this material. Indicate on the forms Shipping Container Data - Part 1 and Inner Container Data - Part 1 if the packaging information provided is actual or proposed.
* After all forms have been completed, forward the original document to shipping site's DOE Field Office and send copy to the attention of the Central Scrap Management Office, Y-12 National Security Complex, PO Box 2009, Oak Ridge TN 37831-8207.

3. SHIPPING SITE NAME: The University of Texas at Austin

SHIPPING SITE ADDRESS: 10100 Burnet Road, Building 159, Austin, TX 78758

Shipping Site Representative *hereby certifies that the material covered by this request will be in conformance with all applicable regulations.*

4. DATE:	5. PRINTED NAME:	Tracy N Tipping	6. SIGNATURE:
	TITLE:	Health Physicist	Digitally signed by 3270 client DN: c=US, st=Texas, o=The University of Texas at Austin, ou=Information Technology Services, cn=3270 client Date: 2019.11.12 15:01:18 -06'00'
	PHONE NUMBER:	512-232-4174	
	E-MAIL ADDRESS:	ttipping@austin.utexa.edu	

SECTION II (Items 7-9) - FOR CONCURRENCE BY COGNIZANT DOE FIELD OFFICE

(Forward signed form to the Y-12 National Security Complex CSMO.)

7. DATE:	8. DOE FIELD OFFICE NAME:	9.

SECTION III (Items 10-16) - FOR USE BY THE CENTRAL SCRAP MANAGEMENT OFFICE (CSMO)

10. RESPONSE:

The uranium scrap listed in Scrap Declaration ZVS-2019-001 should be shipped to the Oak Ridge Y-12 National Security Complex for storage, processing, and reuse. Please contact Phil Cates at (865) 576-5002 for authorization to ship. Material Control and Accountability (MC&A) conditions should be documented and coordinated through the Y-12 MC&A organization [contact Sean King at (865) 241-3064]. A copy of the 741 document should be provided to Becky Eddy, NNSA Production Office/Y-12. Y-12 should receive the material in Project No. FMB0505011.

Concurrence of Section III by the Y-12 National Security Complex

11. DATE:	12. Y-12 National Security Complex CSMO Manager Tammy G. Narramore	13.

Concurrence of Section III by the NNSA Production Office (NPO)

14. DATE:	15. NPO CSMO Manager Melissa A. Einwechter	16. Melissa A. Einwechter Digitally signed by Melissa A. Einwechter Date: 2019.11.14 10:25:30 -05'00'

Enriched Uranium Declaration Request Form

This document has been reviewed by a Y-12 DC/UCNI-RO and has been determined to be UNCLASSIFIED and contains no UCNI. This review does not constitute clearance for Public Release.

Name: Mike Burgess **Date:** 11/13/2019

DECLARATION DESCRIPTION **Declaration Number: ZVS-2019-001**

MATERIAL

General Description of Material: (including type of material, physical and chemical form, description of matrix for mixtures, amount, etc.)

There are 17 research reactor fuel elements of the tubular type described in this declaration. Sixteen (16) are "standard" types with an outer enclosure tube (no fuel), 6 fuel tubes (consisting of 3 plates per tube), and a support column/ring. The fuel tubes/plates are U3Si2-Al cores clad in aluminum. The enclosure tube, support column, and plate webs are constructed of aluminum. Typical loading per standard fuel element is approximately 1187 gU (234 gU5) with an enrichment of about 19.76%. The dimensions are 3.5" diameter by ~29.5" in length (cropped). Gross weight is 5.66 kg. The single fuel element of the "partial" type is identical to the standard except there are 3 fuel tubes and 3 dummy tubes and the enclosure tube was removed. The loading is 654 gU (129 gU5), also at 19.76%. The dimensions are 3" diameter by ~29.5" in length (cropped). The partial element weighs about 3.6 kg.

History of Material: Include original purpose of the material and detailed historical information concerning processing, handling and storage of the material. Attach original paperwork including shipping papers, 741 numbers, etc., if available.

The 17 fuel elements were originally fabricated in the 1980's for the Manhattan College Zero Power Reactor located in Riverdale, NY. They were later (2004) transferred to the University of Texas at Austin. The fuel elements were utilized in zero power operations (~7 hrs) at Manhattan College but with negligible burn-up. They are considered unirradiated. At the University of Texas, they were used only as sealed sources. They were not exposed in a reactor or critical assembly. They have been stored since 2008.

General Description of Packaging (Inner to Outer)

Example:	
Packaging that is in direct contact with material:	*Material (foil) in* **1-liter polybottle**
Next level of packaging:	*Polybottle in* **plastic bag**
Next level of packaging:	*Plastic bag in* **paint can**
Next level of packaging:	*Paint can in* **stainless steel 5-gallon can**
Next level of packaging:	N/A
Next level of packaging:	N/A
Next level of packaging:	N/A
Shipping Container:	*5-gallon can in* **stainless steel 55-gallon drum with vermiculite**

For This Declaration:	
Packaging that is in direct contact with material:	6061 aluminum cladding
Next level of packaging:	Y-12 cans (4.25" OD) as end caps with aluminum tape as banding
Next level of packaging:	Inner Containment Vessel
Next level of packaging:	NA
Next level of packaging:	NA
Next level of packaging:	NA
Shipping Container:	ES-3100

SHIPMENT

Location and **RIS** of material to be shipped:	**Austin, TX / ZVS**
Name of **Shipping Site Representative**:	**Tracy Tipping**
Shipping Site Rep Phone Number:	**512-232-4174**
Shipping Method (commercial or government):	**Commercial**

Declaration Description Form

SHIPPING CONTAINER DATA - PART 1

Declaration Number: ZVS-2019-001

The Shipping Container is the outermost element of a shipping package and is also known as the "outer confinement" package.

Is packaging information you are providing in the table below based on **actual** or **proposed** packaging?	X	**Actual** packaging that meets or exceeds shipping requirements	X	**Proposed** packaging that meets or exceeds shipping requirements
	11/12/2019	Approximate date (mo/yr) material **was** packaged	11/1/2019	Approximate date (mo/yr) material **will be** packaged

Shipping Container Data - Part 1

Type A or Type B Packaging (A or B)	Shipping Container Serial/ID Number	Shipping Authorization for Type A and B Fissile Packaging (e.g., NRC CoC, NNSA OTC, or DOT-approved package)	NRC CoC or NNSA OTC Revision Number for Type A and Type B Fissile Packaging	Shipping Container Security Seal/TID Number	Shipping Container Size (e.g., 55-gal)	Shipping Container Construction Material (e.g. stainless steel)	Type Packing Material used within the Shipping Container (e.g. celotex)	Gross Weight (Shipping Container + Contents) (Indicate unit of measure)
								lb
B	ES-3100-61193	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16461S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	347.0
B	ES-3100-61344	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16462S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	342.0
B	ES-3100-61076	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16463S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	352.0
B	ES-3100-61091	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16464S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	351.0
B	ES-3100-61120	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16465S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	347.0
B	ES-3100-61216	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16466S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	332.0
B	ES-3100-61006	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16467S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	344
B	ES-3100-61380	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16468S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	347
B	ES-3100-61512	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16457S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	348
B	ES-3100-61052	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16453S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	348
B	ES-3100-61455	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16455S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	339
B	ES-3100-61014	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16456S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	344
B	ES-3100-61020	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16451S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	338
B	ES-3100-61170	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16452S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	348
B	ES-3100-61286	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16459S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	342
B	ES-3100-61272	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16458S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	350
B	ES-3100-61207	USDOE CoC USA/9315/B(U)F-96	Rev. 15	16460S /	110 cm tall x 49 cm dia.	stainless steel	stainless steel pads	340

	17	**Total number of shipping containers on this page**	**Total gross weight on this page** 5,859.000
	17	**Total number of shipping containers on all pages of Shipping Container Data - Part 1 Forms thru Page [1]**	**Total gross weight on all pages of Shipping Container Data Part - 1 Forms thru Page[1]** 5,859.000

SHIPPING CONTAINER DATA - PART 1

CoC=Certificate of Compliance/OTC=Offsite Transport Certification

SHIPPING CONTAINER DATA - PART 2

Declaration Number: ZVS-2019-001

Shipping Container Data - Part 2

Shipping Container Serial/ID Number (from Part - 1)	Mass of hydrogenous packing material (if applicable)* (grams)	H:X	CoC content description used to calculate the CSI for ES-3100	CSI	Radioactive (RAD) Label Category (I, II, III)	Removable Surface Contamination on the Shipping Container (Alpha) dpm/100cm^2	Removable Surface Contamination on the Shipping Container (Beta-Gamma) dpm/100cm^2	Gamma Exposure @ 1 foot from Outer Surface of the Shipping Container (mR/hr)	Deep Dose (gamma + neutron @ 1 foot from the Shipping Container) (mrem/hr)
ES-3100-61193	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61344	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61076	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61091	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61120	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61216	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61006	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61380	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61512	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61052	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61455	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61014	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61020	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61170	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61286	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61272	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1
ES-3100-61207	0	0	research reactor fuel elements	0	II	<1.73	<7.25	<0.1	<0.1

*not to exceed 500 grams per CV in ES-3100

Shipping Container Data - Part 2 Form

INNER (PRIMARY) CONTAINER DATA - PART 1

Declaration Number: ZVS-2019-001

The inner (primary) container is a stand-alone container that houses the material item(s). The inner (primary) container can be removed from the shipping container and must have an NMC&A approved TID attached. The inner (primary) container may be a stainless steel paint can, crimp-sealed can, specifically designed container, etc. The inner (primary) container may also house additional convenience packaging such as single or multiple polybottles, plastic bags, etc. that contain the actual material item(s). The gross, tare, and net weights will be established for the inner (primary) container. The inner (primary) container is not the same as the inner containment vessel (e.g., 2R).

Is packaging information you are providing in the table below based on **actual** or **proposed** packaging?	X	**Actual** packaging that meets or exceeds shipping requirements	X	**Proposed** packaging that meets or exceeds shipping requirements
	11/12/2019	Approximate date (mo/yr) material **was** packaged	11/1/2019	Approximate date (mo/yr) material **will be** packaged

Inner (Primary) Container Data - Part 1

Shipping Container Serial/ID Number (from Shipping Container Data - Part 1)	**Inner (Primary) Container Serial/ID Number** (If applicable)	**NMC&A Approved TID Number**	**Inner (Primary) Container Type** (e.g., paint can, crimp-sealed can, etc.)	**Inner (Primary) Container Size** (e.g., 1-gallon, 2-liter, etc.)	**Inner (Primary) Container Construction Material** (e.g., stainless steel, etc.)	**Type of Lid Closure on Inner (Primary) Container** (e.g., screw-cap, paint lid, pressed, crimped, etc.)	**Outer Diameter of Inner (Primary) Container** (inches)	**Overall Height of Inner (Primary) Container** (inches)	**Packing Material within Inner (Primary) Container** (if applicable)
ES-3100-61193	PTR-1A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61344	PTR-2A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61076	PTR-3A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61091	PTR-4A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61120	PTR-6A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61216	PTR-7A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61006	PTR-9A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61380	PTR-16A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61512	PTR-17A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61052	PTR-18A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61455	PTR-19A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61014	PTR-20A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61020	PTR-21A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61170	PTR-23A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61286	PTR-24A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61272	PTR-25A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA
ES-3100-61207	PTR-P-1A		clad plates	4.25" dia. x 29.5" L	aluminum	roll-bonded plates	4.25" dia. end cap	29.5"	NA

17	**Total number of inner (primary) containers on this page**
17	**Total number of inner (primary) containers thru Page [1] of Inner Container Data - Part 1 Forms**

Inner (Primary) Container - Part 1 Form

INNER (PRIMARY) CONTAINER DATA - PART 2

Declaration Number: ZVS-2019-001

Inner (Primary) Container Data - Part 2

Shipping Container Serial/ID Number (from Shipping Container Data - Part 1)	Inner (Primary) Container Serial/ID Number (from Inner Container Data - Part -1, if applicable)	Gross Weight of Inner (Primary) Container (grams)	Tare Weight of Inner (Primary) Container (grams)	Net Weight of Inner (Primary) Container (grams)	Removable Surface Contamination on the Inner (Primary) Container (Alpha) dpm/100cm^2	Removable Surface Contamination on the Inner (Primary) Container (Beta-Gamma) dpm/100cm^2	Gamma Exposure @ 1 foot from Outer Surface of Inner (Primary) Container (mR/hr)	Deep Dose (gamma + neutron @ 1 foot from Inner (Primary) Container) (mrem/hr)
ES-3100-61193	PTR-1A	6,150.00	497.00	5,653.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61344	PTR-2A	6,099.00	491.00	5,608.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61076	PTR-3A	6,186.00	516.00	5,670.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61091	PTR-4A	6,152.00	491.00	5,661.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61120	PTR-6A	6,177.00	491.00	5,686.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61216	PTR-7A	6,171.00	493.00	5,678.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61006	PTR-9A	6,178.00	495.00	5,683.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61380	PTR-16A	6,162.00	487.00	5,675.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61512	PTR-17A	6,160.00	495.00	5,665.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61052	PTR-18A	6,163.00	494.00	5,669.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61455	PTR-19A	6,138.00	494.00	5,644.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61014	PTR-20A	6,122.00	493.00	5,629.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61020	PTR-21A	6,184.00	495.00	5,689.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61170	PTR-23A	6,115.00	494.00	5,621.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61286	PTR-24A	6,168.00	494.00	5,674.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61272	PTR-25A	6,159.00	491.00	5,668.00	<1.73	<7.25	<0.1	<0.1
ES-3100-61207	PTR-P-1A	4,094.00	492.00	3,602.00	<1.73	<7.25	<0.1	<0.1
Total weights on this page:		**102,578.000**	**8,403.000**	**94,175.000**				
Total weights from all pages of Inner Container Data - Part 2 thru Page [1]		**102,578.000**	**8,403.000**	**94,175.000**				

Inner Container Data - Part 2 Form

MATERIAL DATA - PART 1

Material data applies to the actual item(s) being shipped.

Declaration Number: ZVS-2019-001

Material Data - Part 1

Shipping Container Serial/ID Number (from Shipping Container Data - Part 1)	Inner (Primary) Container Serial/ID Number (from Inner Container Data - Part 1, if applicable)	Material Item ID Number	Material Description*	Foreign Obligations (EURATOM etc...)	Net Weight of Material (grams)	Weight % SNM	Grams Uranium	Weight % U-235	Grams U-235
ES-3100-61193	PTR-1A	PTR-1A	MCZPR fuel element	None	5,653.00	4.15%	1,186.38	19.76%	234.43
ES-3100-61344	PTR-2A	PTR-2A	MCZPR fuel element	None	5,608.00	4.18%	1,186.52	19.76%	234.46
ES-3100-61076	PTR-3A	PTR-3A	MCZPR fuel element	None	5,670.00	4.14%	1,186.49	19.76%	234.47
ES-3100-61091	PTR-4A	PTR-4A	MCZPR fuel element	None	5,661.00	4.14%	1,186.42	19.76%	234.44
ES-3100-61120	PTR-6A	PTR-6A	MCZPR fuel element	None	5,686.00	4.12%	1,186.57	19.76%	234.46
ES-3100-61216	PTR-7A	PTR-7A	MCZPR fuel element	None	5,678.00	4.13%	1,186.34	19.76%	234.42
ES-3100-61006	PTR-9A	PTR-9A	MCZPR fuel element	None	5,683.00	4.13%	1,186.48	19.76%	234.46
ES-3100-61380	PTR-16A	PTR-16A	MCZPR fuel element	None	5,675.00	4.13%	1,185.73	19.76%	234.30
ES-3100-61512	PTR-17A	PTR-17A	MCZPR fuel element	None	5,665.00	4.14%	1,186.04	19.77%	234.44
ES-3100-61052	PTR-18A	PTR-18A	MCZPR fuel element	None	5,669.00	4.14%	1,185.61	19.77%	234.44
ES-3100-61455	PTR-19A	PTR-19A	MCZPR fuel element	None	5,644.00	4.15%	1,186.32	19.77%	234.50
ES-3100-61014	PTR-20A	PTR-20A	MCZPR fuel element	None	5,629.00	4.16%	1,185.61	19.77%	234.40
ES-3100-61020	PTR-21A	PTR-21A	MCZPR fuel element	None	5,689.00	4.12%	1,186.32	19.76%	234.43
ES-3100-61170	PTR-23A	PTR-23A	MCZPR fuel element	None	5,621.00	4.17%	1,186.66	19.76%	234.51
ES-3100-61286	PTR-24A	PTR-24A	MCZPR fuel element	None	5,674.00	4.13%	1,186.48	19.76%	234.45
ES-3100-61272	PTR-25A	PTR-25A	MCZPR fuel element	None	5,668.00	4.14%	1,186.46	19.76%	234.47
ES-3100-61207	PTR-P-1A	PTR-P-1A	MCZPR "partial" fuel element	None	3,602.00	3.59%	654.15	19.76%	129.28
			Total on this page:		94,175.000		19,634.580		3,880.360
			Total thru Page [1] of Material Data - Part 1 Forms:		94,175.000		19,634.580		3,880.360

* Attach description of composition (lab analysis) if isotopes of uranium other than U-235 (U-232, U-233, U-234, U-236, or U-238) or elements other than uranium are present; e.g., alloyed metal, radionuclides (other than uranium and daughters in secular equilibrium), impurities, etc.; Provide description of matrix for mixtures.

Material Data - Part 1 Form

MATERIAL DATA - PART 2

Declaration Number: ZVS-2019-001

Material Data - Part 2

Shipping Container Serial/ID Number (Shipping Container Data - Part 1)	Inner (Primary) Container Serial/ID Number (Inner Container Data - Part 1, if applicable)	Material Item ID Number (Material Data - Part 1)	Project Number	Excess (E)/ National Security (NS)/ Surplus(S)	Category of Material (I, II, III, IV)	Attractiveness (A, B, C, D, E)	Beta Readings @ Contact with Material (mrad/hr)	Gamma Exposure @ 1 foot from Material (mR/hr)	Deep Dose (gamma + neutron @ 1 foot from Material) (mrem/hr)	Irradiated (Y/N)
ES-3100-61193	PTR-1A	PTR-1A			IV	E	0.6	<0.1	<0.1	N
ES-3100-61344	PTR-2A	PTR-2A			IV	E	0.6	<0.1	<0.1	N
ES-3100-61076	PTR-3A	PTR-3A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61091	PTR-4A	PTR-4A			IV	E	0.6	<0.1	<0.1	N
ES-3100-61120	PTR-6A	PTR-6A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61216	PTR-7A	PTR-7A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61006	PTR-9A	PTR-9A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61380	PTR-16A	PTR-16A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61512	PTR-17A	PTR-17A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61052	PTR-18A	PTR-18A			IV	E	0.6	<0.1	<0.1	N
ES-3100-61455	PTR-19A	PTR-19A			IV	E	0.6	<0.1	<0.1	N
ES-3100-61014	PTR-20A	PTR-20A			IV	E	0.6	<0.1	<0.1	N
ES-3100-61020	PTR-21A	PTR-21A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61170	PTR-23A	PTR-23A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61286	PTR-24A	PTR-24A			IV	E	0.5	<0.1	<0.1	N
ES-3100-61272	PTR-25A	PTR-25A			IV	E	0.6	<0.1	<0.1	N
ES-3100-61207	PTR-P-1A	PTR-P-1A			IV	E	0.4	<0.1	<0.1	N

Material Data - Part 2 Form

IRRADIATION QUESTIONNAIRE AND CONCURRENCE STATEMENT **Declaration Number:** ZVS-2019-001

Has the material in the Declaration been subjected to irradiation in a nuclear reactor or accelerator?

☐ No Go to Section I

☒ Yes Go to Section II

SECTION I

I concur that the material described in this declaration is not irradiated and has no known contaminants resulting in discrete quantities of fission products or transuranic elements.

Shipping Site Representative Printed Name: Tracy Tipping

Shipping Site Representative Signature: ×

Date:

SECTION II

If the material is irradiated or slightly irradiated, please complete the following questions.

When was the material **first** irradiated or made critical or subcritical? 1992

How long did the material remain in this condition? less than 7 hours

When was it **last** irradiated or made critical or subcritical? 1992

How long did the material remain in this condition? less than 7 hours

What was the neutron flux to which the material in question was subjected? Max power 0.1 watt

For how long? 7 hours

For **solids**, what is the removable, alpha surface activity in dpm/100 cm^2 for each item:

a. attributed to transuranics (e.g., neptunium, plutonium, americium)

b. attributed to uranium

What is the alpha activity in curies per gram or multiples thereof for each alpha-emitting radionuclide? (Uranium alpha activity may be combined to yield a total uranium value with the exception of U-232 and U-233. Values for U-232 or U-233 should be included separately.)

What is the beta activity in curies per gram or multiples thereof for each beta emitting radionuclide? (Uranium daughter beta activity may be combined to yield a total uranium value.)

What is the gamma activity in curies per gram or multiples thereof for each gamma emitting radionuclide?

What is the source of information/documentation for compiling your responses to the questions on this form?

I concur that the information provided above regarding irradiated or slightly irradiated material is correct.

Shipping Site Representative Printed Name:

Shipping Site Representative Signature:

Digitally signed by 3270 client
DN: c=US, st=Texas, o=The University of Texas at Austin, ou=Information Technology Services, cn=3270 client
Date: 2019.11.12 15:01:48 -06'00'

Date:

Irradiation Questionnaire and Concurrence Form

Y- 12 NATIONAL SECURITY COMPLEX

NON-RCRA CERTIFICATION STATEMENT

"We certify according to process knowledge or through analytical determination that the contents of the containers described in Declaration Request **ZVS-2019-001** **do not** contain Resource Conservation and Recovery Act (RCRA) Hazardous Waste as identified in 40 CFR 261.3."

Shipping Site Name:	Austin, TX / ZVS
Shipping Site Representative Printed Name:	Tracy Tipping
Shipping Site Representative Signature:	Digitally signed by 3270 client DN: c=US, st=Texas, o=The University of Texas at Austin, ou=Information Technology Services, cn=3270 client Date: 2019.11.12 15:02:07 -06'00'
Date of Signature:	

Non-RCRA Certification Statement Form