MECHANICAL DATA SHEET: VESSEL

PLANT ITEM No.
24590-PTF-MV-CNP-VSL-00001

R10327824

Project:	**RPP-WTP**	P&ID:	**24590-PTF-M6-CNP-P0001, 24590-PTF-M6-CXP-P0007**
Project No:	**24590**	Process Data Sheet:	**Deleted**
Project Site:	**Hanford**	Vessel Drawing	**24590-PTF-MV-CNP-P0005**
Description:	**Cesium Evaporator Eluate Lute Pot**		

ISSUED BY RPP-WTP PDC INIT 6/25/04 DATE

Reference Data

Charge Vessels (Tag Numbers)	**N/A**
Pulsejet Mixers / Agitators (Tag Numbers)	**N/A**
RFDs/Pumps (Tag Numbers)	**N/A**

Design Data

Quality Level		**QL-1**	Fabrication Specs	**24590-WTP-3PS-MV00-TP001**		
Seismic Category		**SC-I**	Design Code	**ASME VIII Div 1**		
Service/Contents		**Radioactive Liquid**	Code Stamp	**Yes**		
Design Specific Gravity		**1.03**	NB Registration	**Yes**		
Maximum Operating Volume	gal	**108.47**	Weights (lbs)	Empty	Operating	Test
Total Volume	gal	**108.47**	Estimated	**1,000**	**2,020**	**1,910**
			Actual *			

Inside Diameter	inch	**48**			Wind Design	**N/A**	
Length/Height (TL-TL)	inch	**3**			Snow Design	**N/A**	
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design	**24590-WTP-3PS-MV00-TP002** **24590-WTP-3PS-SS90-T0001**	
Internal Pressure	psig	**30**	**40**	**N/A**	Seismic Base Moment *	ft*lb	
External Pressure	psig	**ATM**	**ATM**	**N/A**	Postweld Heat Treat	**Per Spec**	
Temperature	°F	**77**	**237**	**N/A**	Corrosion Allowance	Inch	**0.04**
Min. Design Metal Temp.	°F	**40**			Hydrostatic Test Pressure *	psig	

Please note that source, special nuclear and byproduct materials, as defined in the Atomic Energy Act of 1954 (AEA), are regulated at the U.S. Department of Energy (DOE) facilities exclusively by DOE acting pursuant to its AEA authority. DOE asserts, that pursuant to the AEA, it has sole and exclusive responsibility and authority to regulate source, special nuclear, and byproduct materials at DOE-owned nuclear facilities. Information contained herein on radionuclides is provided for process description purposes only.

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6/26/04

EXPIRES 12/10/04

This bound document contains a total of 2 sheets

REV	DATE	REASON FOR REVISION	PREPARER	CHECKER	REVIEWER	APPROVER
0	6/26/04	Issued for Permitting Use				

BECHTEL	**MECHANICAL DATA SHEET: VESSEL**	**PLANT ITEM No.** ***24590-PTF-MV-CNP-VSL-00001***

Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Top Head	***SA240 304 (Note 1)***	***See Drawing***	***Auxiliary (see Note 2)***
Shell	***SA240 304 (Note 1)***	***See Drawing***	***Primary (See Note 2)***
Bottom Head	***SA240 304 (Note 1)***	***See Drawing***	***Primary (See Note 2)***
Support	***SA240 304 (Note 1)***	***See Drawing***	***N/A***
Internal Coils/External Jacket	***N/A***	***N/A***	***N/A***
Internals	***SA240 304 / SA312 TP304 (Note 1)***	***See Drawing***	***N/A***
Pipe	***SA312 TP304 (Note 1)***	***See Drawing***	***See Note 2***
Forgings/ Bar stock	***SA182 F304 (Note 1)***	***See Drawing***	***N/A***
Gaskets	***N/A***	***N/A***	***N/A***
Bolting	***N/A***	***N/A***	***N/A***

Miscellaneous Data

Orientation	***Vertical***	Support Type	***Skirt***
Insulation Function	***None***	Insulation Material	***None***
Insulation Thickness (inch)	***None***	Internal Finish	***Welds descaled as laid***
		External Finish	***Welds descaled as laid***

Remarks

* To be determined by the vendor.

Note 1 : 304 stainless steel materials shall have carbon content of 0.030% maximum, dual certified. Non-welded items are excluded from this requirement.

Note 2 : All welds forming part of the primary and auxiliary containment including nozzle attachment welds shall be subjected to 100% volumetric examination.

Note 3 : Vessel volumes are approximate and do not account for manufacturing tolerances, nozzles, and displacement of internals

Note 4: This vessel is in a Black Cell

Note 5: Contents of this document are Dangerous Waste Permit affecting.