MECHANICAL DATA SHEET: VESSEL

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

Project	***RPP-WTP***	P&ID	***24590-PTF-M6-CXP-P0001, 24590-PTF-M6-CXP-P0007***
Project No	***24590***	Process Calculation	***24590-PTF-MVC-CXP-00001***
Project Site	***Hanford***	Vessel Drawing	***24590-PTF-MV-CXP-P0001***
Description	***Cs IX Feed Vessel***		

ISSUED BY RPP-WTP PDC
INIT DATE

Reference Data

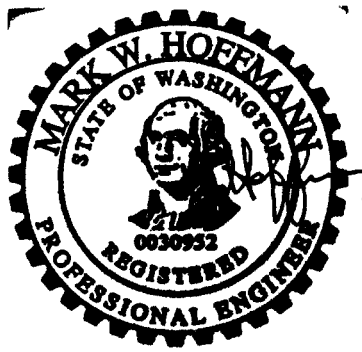
Charge Vessels (Tag Numbers)	***Not Applicable***
Pulsejet Mixers / Agitators (Tag Numbers)	***Not Applicable***
RFDs/Pumps (Tag Numbers)	***Not Applicable***

Design Data

Quality Level		***See Vessel Drawing***			Fabrication Specs	***24590-WTP-3PS-MV00-TP001***	
Seismic Category		***SC-1***			Design Code	***ASME VIII Div 1***	
Service/Contents		***Radioactive Liquid***			Code Stamp	***Yes***	
Design Specific Gravity		***1.26***			NB Registration	***Yes***	
Operating Volume	gal	***92,850***			Weights (lbs)	Empty	Operating	Test
Total Volume	gal	***103,350***			Estimated	***166,100***	***1,164,200***	***1,028,300***
					Actual *	***169,000***		***1,000,000***

Inside Diameter	inch	***276***			Wind Design	***Not Required***	
Length/Height (TL-TL)	inch	***342***			Snow Design	***Not Required***	
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design	***24590-WTP-3PS-SS90-T0001*** ***24590-WTP-3PS-MV00-TP002***	
Internal Pressure	psig	***Atm***	***15***	***N/A***	Seismic Base Moment *	ft*lb	
External Pressure	psig	***0.07***	***10***	***N/A***	Postweld Heat Treat	***Not Required***	
Temperature	°F	***113***	***138***	***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.



5/26/04

EXPIRES 12/10/04

This bound document contains a total of 2 sheets

REV	DATE	REASON FOR REVISION	PREPARER	CHECKER	REVIEWER	APPROVER
0	5/26/04	Issued for Permitting Use				

	MECHANICAL DATA SHEET: VESSEL	PLANT ITEM No. 24590-PTF-MV-CXP-VSL-00001

Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Top Head	***SA 240 316 with max. Carbon of 0.030%***	***See Drawing***	***Auxiliary (Note 1)***
Shell	***SA 240 316 with max. Carbon of 0.030%***	***See Drawing***	***Primary (Note 1)***
Bottom Head	***SA 240 316 with max. Carbon of 0.030%***	***See Drawing***	***Primary (Note 1)***
Support	***SA 240 304 with max. Carbon of 0.030%***	***See Drawing***	***N/A***
Jacket/Coils/Half-Pipe Jacket	***N/A***	***N/A***	***N/A***
Internals	***SA240 316 with max. Carbon of 0.030%***	***See Drawing***	***Thermowell Primary (Note 1)***
Pipe	***SA312 TP316 Smls with max. Carbon of 0.030%***	***See Drawing***	***Note-1***
Forgings/ Bar stock	***SA182 F316 with max. Carbon of 0.030%***	***See Drawing***	***As Note-1 for Nozzle Necks***
Gaskets	***N/A***	***N/A***	***N/A***
Bolting	***N/A***	***N/A***	***N/A***

Miscellaneous Data

Orientation	***Vertical***	Support Type	***Skirt***
Insulation Function	***N/A***	Insulation Material	***N/A***
Insulation Thickness (inch)	***N/A***	Weld Surface Finish	***De-scaled as laid***

Remarks

* To be determined by the vendor.

Note 1: All welds forming part of the primary and auxiliary containments, including the nozzle attachment welds shall be subjected to 100% volumetric examination.

Note 2: Vessel volumes are approximate and do not account for manufacturing tolerances, nozzles, and displacement of internals.

Note 3: This vessel is located in a Black Cell.

Note 4: Contents of this document are Dangerous Waste Permit affecting.