MECHANICAL DATA SHEET: VESSEL

R10505703

PLANT ITEM No.
24590-LAW-MV-RLD-VSL-00005

Project	***RPP-WTP***	P&ID	***24590-LAW-M6-RLD-P0001***
Project No	***24590***	Process Data Sheet	***Deleted*** 2
Project Site	***Hanford***	Vessel Drawing	***24590-LAW-MV-RLD-P0003***
Description	***SBS Condensate Collection Vessel***		

Reference Data

Charge Vessels (Plant Item Numbers)	***Not Applicable***
Pulsejet Mixers (Plant Item Numbers)	***Not Applicable***

Design Data

Quality Level		***CM***	Fabrication Specs	***24590-WTP-3PS-MV00-TP001***		
Seismic Category		***SC-III*** 2	Design Code	***ASME VIII Div 1***		
Service/Contents		***SBS Purge Effluents***	Code Stamp	***Yes***		
			NB Registration	***Yes***		
Design Specific Gravity		***1 to 1.38***	Weights (lbs)	Empty	Operating	Test
Operating Volume	gal	***23400***	*Estimated*	***67,700***	***348,800***	***283,000***
Total Volume	gal	***25780***	*Actual* *			

Inside Diameter	inch	***192***			Wind Design	***Not Required***	
Length/Height	inch	***185 (See Vessel Drawing)***			Snow Design	***Not Required***	
		Vessel Operating	Vessel Design	Coil/Jacket Design	Seismic Design	***24590-WTP-3PS-FB01-T0001*** ***24590-WTP-3PS-MV00-TP002***	
Internal Pressure	psig	***0***	***15***	***N/A***	Seismic Base Moment *	ft*lb	
External Pressure	psig	***2.6***	***15 (FV)***	***N/A***	Postweld Heat Treat	***Not Required***	
Temperature	°F	***167***	***200***	***N/A***	Corrosion Allowance	inch	***0.04***
Min. Design Metal Temp.	°F	***40***			Hydrostatic Test Pressure *	psig	

Note: 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 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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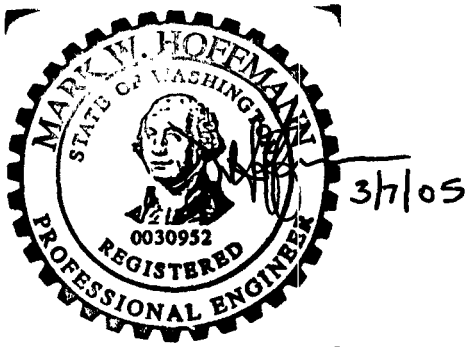

EXPIRES 12/10/06

This Bound Document Contains a total of 2 Sheets.

REV	DATE	REASON FOR REVISION	PREPARER	CHECKER	REVIEWER	APPROVER
2	3/7/05	Issued for Permitting Use	J. Jackson	P. DeGraaf	C.Slater	M. Hoffmann
1	11/12/03	Issued for Permitting Use	J. Jackson	P. DeGraaf	C.Slater	M. Hoffmann
0	9/17/02	Issued for Permitting Use	J. Jackson	C. Slater	N/A	S. Kirk

	MECHANICAL DATA SHEET: VESSEL	PLANT ITEM No. 24590-LAW-MV-RLD-VSL-00005

Materials of Construction

Component	Material	Minimum Thickness / Size	Containment
Top Head and Top Head Nozzle Re-pads	SA240 316/SA182 F316 with max Carbon of 0.030%	See Drawing	Auxiliary
Top Head Nozzles N01, N02, N02A, N03, N03A, N04, N05, N09, N11, N15, N16, N16A, N18, N19, N20, and N20A 2	SB688 UNS N08367 or SB622 N10276 Seamless 2	See Drawing	Auxiliary, Note-1
Top Head Nozzles N06, N07, N08, N10, and N17	SA240 316/SA182 F316 with max Carbon of 0.030 % 2	See Drawing	Auxiliary, Note-1
Top Head Nozzles N12, N13, and N14 2	SB622 N10276 Seamless 2	See Drawing	Auxiliary, Note-1
Shell 2	SB688 UNS N08367 2	See Drawing	Primary, Note-1
Bottom Head	SB688 UNS N08367	See Drawing	Primary
Support 2	SA240 304 with max Carbon of 0.030% 2	See Drawing	N/A
Internals	UNS N08367	See Drawing	Primary
"O" Ring Flanges	UNS N08367	See Drawing	As Note-1 for Nozzle Necks
"O" Ring Gaskets 2	Parker E0540-80 2	See Drawing	As Note-1 for Nozzle Necks
Flat Gaskets 2	EPDM 2		
Bolting (For Flanges)	A193 Gr. B8 Cl. 1	See Drawing	N/A

Miscellaneous Data

Orientation	Vertical	Support Type	Skirt
Insulation Function	Not Applicable	Insulation Material	Not Applicable
Insulation Thickness (inch)	Not Applicable	Welds Surface Finish	De-scaled as Laid

Notes

* To be determined by the vendor.

Note 1: Nozzle necks below the high operating liquid level are Primary, others Auxiliary.

Note 2: NDE for this vessel must meet requirements per paragraph 6.4.2 of 24590-WTP-3PS-MV00-TP001.

Note 3: This vessel is not subjected to thermal cycling or pressure cycling.

Note 4: Vessel volumes are approximate and do not account for manufacturing tolerances, nozzles, and displacement of internals.

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