

	MECHANICAL DATA SHEET: TANK	Plant Item No. (Equipment No.) 24590-LAW-MT-LVP-TK-00001

Project:	RPP-WTP	P&ID:	24590-LAW-M6-LVP-00002003 <i>M24 10-05-13</i>
Project No:	24590	Process Data Sheet:	N/A
Project Site:	Hanford	Tank Drawing	24590-LAW-MT-LVP-00004
Description:	LAW Caustic Collection Tank		

Design Data

Quality Level	Commercial Grade (CM)		Fabrication Specs	N/A		
Seismic Category	SC-III		Design Standard	API 650 J & S		
Service/Contents	Scrubber Solution		Pumping Rate In	GPM	62	
	Operating	Design	Pumping Rate Out	GPM	Batch	
Internal Pressure	psig	ATM	Per Code	Postweld Heat Treat	API 650	
Temperature	°F	144	180	Design Specific Gravity	1.14	
Min. Design Metal Temp.	°F	50				
Vapor Pressure	psia	N/A				
Max Operating Volume	gal	7,325^{Note 4}	Estimated	12,500	125,500	131,300
			Actual*	12,646^{Note 3}	147,795^{Note 3}	131,198^{Note 3}
Total Volume	gal	14,593^{Note 4}				

Shell Design	API 650					
Roof Design	API 650					
Roof Type	Conical					
Frangible Roof Joint	No					
Uniform Live Load (roof)	lb/ft ²	25	Special Loads:	lb/ft ²	24590-WTP-3PS-FB01-T0001	
Insulation Loads	lb/ft ²	N/A		Gases in Vapor Space		
Roof Seam	Butt			Floor Seam	Butt	
Foundation Type	Concrete Pad					
Lightning Protection	Grounding Lugs					
Cathodic Protection	N/A					

Seismic Design	24590-WTP-3PS-FB01-T0001					
Seismic Zone	2B			Importance Factor	Per API 650	
Zone Factor	Per API 650			Site Coefficient	N/A	
Wind Velocity	N/A	Outside Temp, Min/Max, °F	59/95	Provide Intermediate Wind Girder	N/A	
Maximum Precipitation	N/A			Snow Accumulation	None	

Materials of Construction

Component	Material	Minimum Thickness/ Size **	Corrosion Allowance, in	Coatings/Finishing/Surface Preparation Specification 24590-WTP-3PS-AFPS-T0005	
				Internal (See Specification)	External (See Specification)
Roof	SA240 316 (Note 1)	0.250"	0.04	None	None
Shell	SA240 316 (Note 1)	0.3125"	0.04	None	None
Floor	SA240 316 (Note 1)	0.3125"	0.04	None	None
Internals	SA240 316 (Note 1)	0.2275"	0.04	None	None
Structural - Internal	SA240 316 (Note 1)	0.2275"	0.04	None	None
Structural - External	SA240 316 (Note 1)	API 650	N/A	None	None
Pipe	SA312 TP316 (Note 1)	API 650	0.04	None	None
Forgings/ Bar stock	SA182 F316 (Note 1)	N/A	0.04	N/A	None
Gaskets	Spiral Wound 316 FG	N/A	N/A	N/A	None
Bolting	SA193 B8	N/A	N/A	N/A	None

Miscellaneous data.

Insulation Function	N/A	Insulation Material
Insulation Thickness (inch).	N/A	N/A

Remarks



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24590-LAW-MT-LVP-TK-00001

Notes:

- * To be determined by vendor.
- ** The minimum thickness stated includes corrosion allowance.

Note 1: SA240 316, SA182 F316 & SA312 TP316 stainless steel material shall have carbon content of 0.030% maximum, dual certified. Non welded items are excluded from these requirements.

Note 2: Contents of this document are Dangerous Waste Permit affecting.

Note 3: From supplier drawing 24590-CM-POA-MVA0-00019-03-00003, Rev C. Weights are 'full to top of roof angle.'

Note 4: Reference calculation 24590-LAW-MVC-LVP-00001, Rev 1, Section 8.6, Table 3.

REV	DATE	REASON FOR REVISION	PREPARER	CHECKER	REVIEWER	E&NS	APPROVER
1	10-2-13	Updated weight data from supplier drawings and volumes from calculation.	MR Galvin	MF Meyer	BS Austen	DE Krahn	PE Ortel
0	04/14/04	Issued for Purchase	-	-	-	-	-

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