


DELAY TANK DATA SHEET

No.	By	Chk	App	Date	Description	Doc. No.: DS-1813-02	Rev.: 1
1	CH	CS	TB	6/13/19	Incorporated Design Changes for 100%	Project Name: TSCR	
						Project Number: 18-13	
						Location: Richland, WA	
						Tag: POR655-WP-TK-550	

DESIGN / OPERATING REQUIREMENTS

1	Service :	Pressure Vessel, Code Stamped	Process Contents:	Treated Waste
2	Design Press. @ Temp. - Internal (at top):	400 psig @ 180 °F	Δ P Across Internals:	N/A psi
3	Design Press. @ Temp. - External:	Full Vacuum psig @ 180 °F	S. G of Process Fluid:	1.27
4	Min. Design Metal Temperature (MDMT):	-20 °F @ 448 psig	Design Liquid Level:	100%
5	Operating Pressure - Internal:	66 psig @ 77 °F	Head Joint Efficiency:	1.0
6	Min. Operating Temperature:	60 °F @ 66 psig	Shell Joint Efficiency:	1.0
7	MAWP Basis:	448 psi in RPP-CALC-62484		
8	Corrosion Allowance: Yes (0.2 MILS per Year), See Note 2	Shell and Heads: 0.001 Inches	Nozzles: 0.001 Inches	Internals: 0.001 Inches
9	Cyclic Service: Yes, See Note 1	Lethal Service: N/A	Code Case(s):	2732-1
10	Construction Code:	ASME B&PV Section VIII, Div. 1, 2017 Edition	Design Life: 5 years	Stamping: Yes
11	National Board Registration :	Yes	Lethal Stamp: N/A	
12	Capacity (Cavity Volume):	Full: 300 Gal.	Operating: 300 Gal.	
13	Wind: N/A	Exposure: N/A	Basic Wind Speed: N/A mph	Importance Factor: N/A
14	Seismic: SDC-2, LS-C	Importance Factor: 1.5	Soil Profile Type: Site Class D	

INSPECTION AND TESTING

15	Radiography:	RPP-SPEC-61910	Ultrasonic:	RPP-SPEC-61910
16	Magnetic Particle:	N/A	Charpy Impact: Per ASME Code	at -20 °F
17	Liquid Penetrant:	RPP-SPEC-61910	Hardness:	RPP-SPEC-61910
18	Hydrotest: Hydro 585 psi @ 1 Hour		Future Field Test: RPP-SPEC-61910	(Corroded)
19	Min. Hydrotest Temperature:	32 °F		

APPLICABLE SPECIFICATIONS AND STANDARDS

20	Specifications:	RPP-SPEC-61910
21	Safety Class:	General Service
22	Standards:	ASME B&PV Section VIII, Div. 1, 2017 Edition
23	Drawings:	H-14-111252, H-14-111258

MATERIALS

	Pressure Parts	Non-Pressure Parts	
		External	Internal
24	Plate: SA240 316/316L	SA240 316/316L	SA240 316/316L
25	Forgings: SA182 F316/316L, SA403 WP316/316L	SA182 F316/316L, SA403 WP316/316L	N/A
26	Pipe & Tube: SA312 TP316/316L	SA312 TP316/316L	N/A
27	Bolts & Studs: N/A	N/A	N/A
28	Nuts: N/A	N/A	N/A
29	Rod & Bar: N/A	SA276 316/316L	SA276 316/316L
30	Weld Fittings: SA182 F316/316L, SA403 WP316/316L	SA182 F316/316L, SA403 WP316/316L	N/A
31	Structural Shapes: N/A	SA240 316/316L, SA276 316/316L	SA240 316/316L, SA276 316/316L
32	Shielding: N/A	ASTM A36	N/A

FABRICATION

33	Weld Pressure Joint Requirements:	RPP-SPEC-61910	Seal Weld Internal Parts to Pressure Boundary: Yes
34	Post Weld Heat Treatment:	RPP-SPEC-61910	PWHT Basis: Per ASME Code
35	Internal Coating:	N/A	
36	Surface Preparation:	RPP-SPEC-61910	
37	External Coating:	RPP-SPEC-61910	

APPURTENANCES

38	Lifting Lugs:	See H-14-111252, H-14-111258	Tailing Lug: N/A	Vessel Davit: N/A
39	Ladder and Platforms:	N/A	Pipe Supports / Guides: N/A	Grounding Lugs: N/A
40	Insulation:	N/A	Thk: N/A	In. Density: N/A
41	Fireproofing:	N/A	Thk: N/A	In. Density: N/A

PRELIMINARY LOADS (TO BE CONFIRMED BY SELLER)

42	Weights (lbs):	Shipping: 1,550	Erection: 1,515	Empty: 1,515	Operating: 4,687	Field Test: 1,515
43	Wind:	Shear at Base = N/A	lbs	Moment at Base = N/A	FT-LBS	
44	Seismic:	Shear at Base =	2,480 lbs	Moment at Base =	18,060 FT-LBS	

Notes:

1. **Cyclic Loading of Delay Tank:**

	Min	Max	Frequency / Design Life
Design Pressure	0 psig	400 psig	5
Operating Pressure	0 psig	100 psig	157
Operating Temperature	60 F	95 F	157
Contents Specific Gravity	1.0	1.35	157

2. Pressure Vessel is designated as Non-Corrosive Service. A corrosion allowance of 0.001" is maintained for the vessel and nozzle walls.