Pressure Summary

Component Summary								
Identifier	P Design (psi)	T Design (°F)	MAWP (psi)	MAEP (psi)	T_e external (°F)	MDMT (°F)	MDMT Exemption	Impact Tested
Ellipsoidal Head #3	550	550	554.24	169.4	550	-43.5	Note 1	No
Straight Flange on Ellipsoidal Head #3	550	550	692.88	216.91	550	-43.5	Note 2	No
Shell #1	550	550	689.9	216.91	550	-43.5	Note 2	No
Straight Flange on Bottom Head	550	550	689.83	216.91	550	-43.5	Note 2	No
Bottom Head	550	550	551.09	169.48	550	-43.5	Note 3	No
Manway (M1)	550	550	554.24	216.91	550	-20	Note 4	No
Inlet (N1)	550	550	560.22	216.91	550	-20	Nozzle / Note 5	No
							Pad / Note 6	No
Outlet (N2)	550	550	564.02	169.4	550	-23.8	Note 7	No
Vent (N3)	550	550	0	169.4	550	-20	Note 5	No
Drain (N4)	550	550	558.12	168.87	550	-55	Note 8	No
B16.9 Elbow #1 (N4)	550	550	2,850.76	1,892.4	550	-155	Note 9	No
Nozzle Pipe #1 (N4)	550	550	582.99	1,892.4	550	-20.6	Note 10, 9	No

Chamber Summary	
Design MDMT	32 °F
Rated MDMT	32 °F @ 0 psi
MAWP hot & corroded	0 psi @ 550 °F
MAEP	168.87 psi @ 550 °F
(1) The rated MDMT is limited to the design MDMT based on the setting in the Calculations tab of the Set Mode dialog.	

Notes for Maximum Pressure Rating	
Note #	Details
1.	Option to calculate MAP was not selected. See the Calculation->General tab of the Set Mode dialog.

Notes for MDMT Rating		
Note #	Exemption	Details
1.	Straight Flange governs MDMT	
2.	Material impact test exemption temperature from Fig UCS-66 Curve D = -42°F Fig UCS-66.1 MDMT reduction = 1.5°F, (coincident ratio = 0.9852)	UCS-66 governing thickness = 0.75 in
3.	Straight Flange governs MDMT	
4.	Nozzle is impact test exempt per UG-20(f)	UCS-66 governing thickness = 0.75 in.
5.	LWN rated MDMT per UG-20(f) Flange rated MDMT per UG-20(f) = -20°F Bolts rated MDMT per Fig UCS-66 note (c) = -55°F	
6.	Pad impact test exemption temperature from Fig UCS-66 Curve B = -20°F Fig UCS-66.1 MDMT reduction = 19.8°F, (coincident ratio = 0.8018)	UCS-66 governing thickness = 0.25 in.
7.	LWN rated MDMT per UCS-66(c)(3) Flange rated MDMT per UCS-66(b)(1)(b) = -23.8°F (Coincident ratio = 0.7622) Bolts rated MDMT per Fig UCS-66 note (c) = -55°F	
8.	Material impact test exemption temperature from Fig UCS-66 Curve B = -20°F Fig UCS-66.1 MDMT reduction = 48.4°F, (coincident ratio = 0.5505) Rated MDMT of -68.4°F is limited to -55°F by UCS-66(b)(2)	UCS-66 governing thickness = 0.301 in
9.	Material is impact test exempt to -155°F per UCS-66(b)(3) (coincident ratio = 0.0015)	
10.	Flange rating governs: Flange rated MDMT per UCS-66(b)(1)(b) = -20.6°F (Coincident ratio = 0.7939)	Bolts rated MDMT per Fig UCS-66 note (c) = -55°F