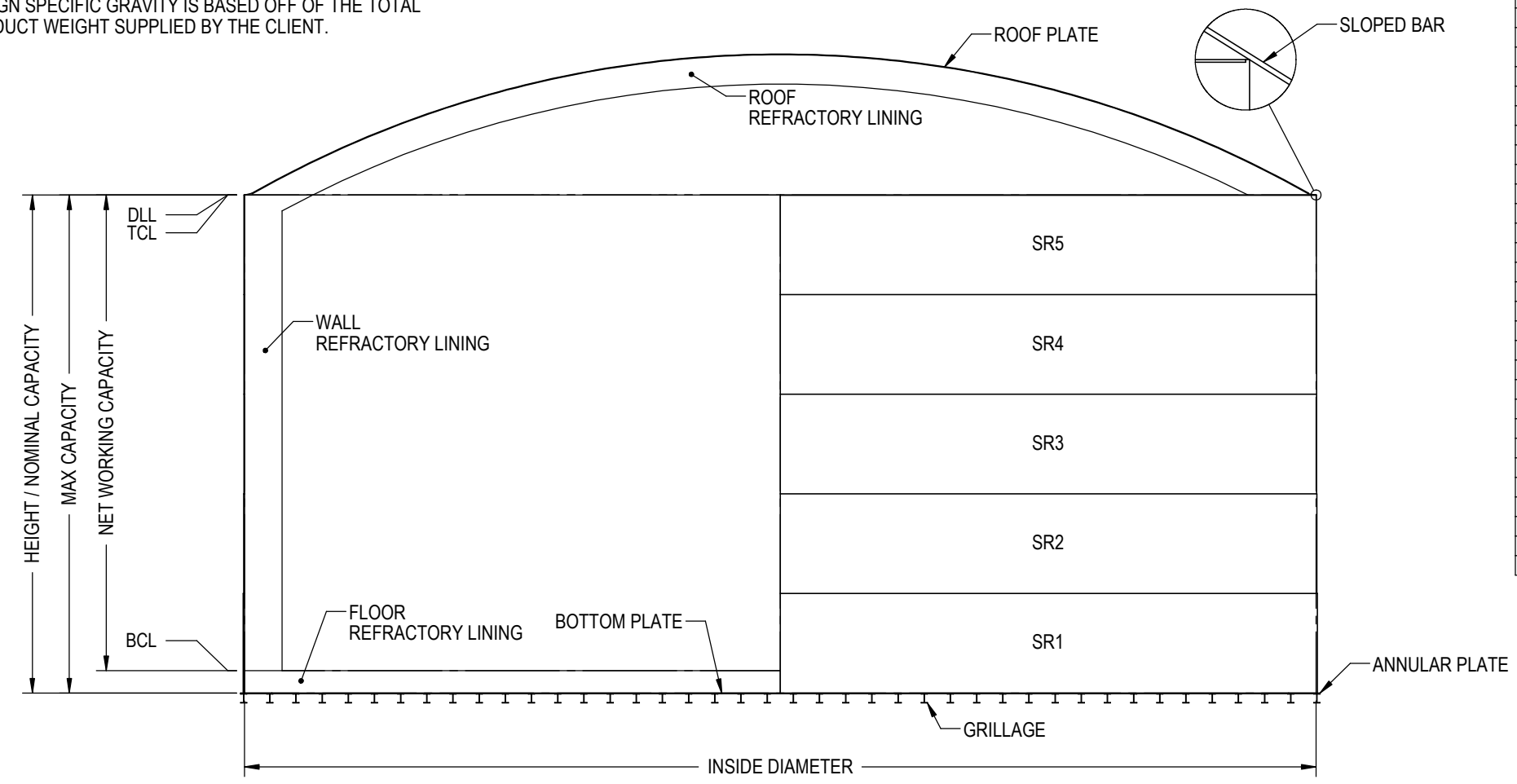


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NOTE:

- FOUNDATIONS NOTES:
AT BASE OF SHELL
ROOF LOADS TRIBUTARY TO SHELL
ROOF LOADS TRIBUTARY TO SHELL AND SHELL WEIGHT
****TRIBUTARY TO FOUNDATION****
- OPERATING PRODUCT TEMPERATURE TO RANGE BETWEEN 1000 °F - 1400 °F. REFRACTORY LINING DESIGN BY OTHERS TO MAINTAIN MAX SHELL TEMPERATURE BELOW 300 °F.
- ROOF REFRACTORY LINING TO BE SELF-SUPPORTED. ROOF CAPABLE OF SUPPORTING UP TO 37.5 PSF ADDITIONAL ROOF DEAD LOAD (25% OF REFRACTORY).
- TANK WILL BE EQUIPPED WITH BLANKETING GAS SYSTEM DESIGNED BY OTHERS.
- DESIGN INCLUDES REFRACTORY AS A COUNTERACTING LOAD AGAINST OVERTURNING.
- MINIMUM IMPACT TEST VALUES OF 30 FT-LB [LONG] OR 20 FT-LB [TRANS] ARE REQUIRED. INCREASE BY 5 FT-LB FOR Q&T/TCMP.
- NOZZLES SHALL BE PREINSTALLED IN SHELL PLATES & ASSEMBLIES SHALL BE POST WELD HEAT TREATED.
- DESIGN SPECIFIC GRAVITY IS BASED OFF OF THE TOTAL PRODUCT WEIGHT SUPPLIED BY THE CLIENT.

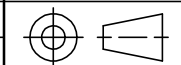
REFRACTORY LINING INFORMATION (SUPPLIED BY CLIENT)						
TANK COMPONENT	LINING TYPE	THICKNESS	DENSITY	HOT SIDE TEMP.	COOL SIDE TEMP.	
TANK FLOOR	B&W SR 99	18"	167.9 LB/FT^3	1399 °F	1362 °F	
	BNZ-20 IFB	17.5"	36.0 LB/FT^3	1362 °F	182 °F	
	TC-500 PAPER	0.25"	12.9 LB/FT^3	182 °F	136 °F	
TANK WALL	POLYPROPYLENE	0.25"	56.2 LB/FT^3	136 °F	117 °F	
	B&W SR 99	15"	167.9 LB/FT^3	1399 °F	1386 °F	
	FIBRATEC 2300	4"	17.9 LB/FT^3	1386 °F	1108 °F	
	EXCELFRAZ 1800	2"	14.4 LB/FT^3	1108 °F	120 °F	
	TC-500 PAPER	0.25"	12.9 LB/FT^3	120 °F	99 °F	
TANK ROOF	POLYPROPYLENE	0.25"	56.2 LB/FT^3	99 °F	91 °F	
	B&W SR 99	10"	167.9 LB/FT^3	1399 °F	1387 °F	
	KAOWOOL 8 LB	18"	6.0 LB/FT^3	1387 °F	108 °F	
	POLYPROPYLENE	0.25"	56.2 LB/FT^3	108 °F	97 °F	



TANK DESIGN DATA SHEET

REV	TANK DATA
0	INSIDE DIAMETER 85' - 7"
0	HEIGHT 39' - 9 1/2"
0	TANK DESIGN CODE API 650 ED 12, ANNEX F, M
0	WIND DESIGN CODE API 650 ED 12
0	SEISMIC DESIGN CODE API 650 ED 12
0	OTHER DESIGN CODES ASCE 7-10, IBC 2012
REV	CAPACITY
0	NOMINAL / MAX / NET WORKING 40770 BBL / 40770 BBL / 38934 BBL
0	BTM / TOP CAPACITY LIMIT [BCL] / [TCL] 1' - 9 1/2" / 39' - 9 1/2"
REV	DESIGN PARAMETERS
0	INTERNAL / EXTERNAL PRESSURE 1.03 PSI / 1 IN H2O
0	MAXIMUM / MINIMUM TEMPERATURE 300 ° F / 40 ° F NOTE 2
0	DESIGN METAL TEMPERATURE 40 ° F
0	DESIGN LIQUID LEVEL 39' - 9 1/2"
0	DESIGN SPECIFIC GRAVITY 1.91 NOTE 8
REV	OPERATING CONDITIONS
0	PRODUCT / SPECIFIC GRAVITY MOLTEN SALT / 1.91
0	INTERNAL / EXTERNAL PRESSURE TBD / TBD NOTE 4
0	MAXIMUM / MINIMUM TEMPERATURE NOTE 2
0	MAXIMUM FILL / SUCTION RATE UNKNOWN / UNKNOWN
REV	ENVIRONMENTAL DESIGN PARAMETERS
0	GROUND / SNOW LOAD 5 PSF
0	ROOF LIVE LOAD 20 PSF
0	MISC ROOF DEAD LOAD 15.0 PSF NOTE 3
0	WIND SPEED / EXPOSURE / RISK CATEGORY 110 MPH / C / II
0	Ss / S1 / SITE CLASS / USE GROUP 1.237 / 0.51 / D / I
REV	SHELL STIFFENING
0	COMPRESSION RING DETAIL ANNEX F, FIGURE F.2, DETAIL I
0	COMPRESSION RING SIZE PL - 1/2" x 1' - 0" (0" CA) - A36 [4" FROM SHELL]
REV	ROOF
0	TYPE SELF-SUPPORTED DOME
0	RADIUS 68' - 6"
0	THICKNESS 1/2" (0" CA) (JE = 0.7 NO RT REQ'D)
0	MATERIAL A36
0	WELD BUTT WELD
0	FRANGIBLE NO
REV	ANNULAR RING
0	THICKNESS 3/8" (0" CA)
0	WIDTH 2' - 6"
0	MATERIAL A36
0	WELD BUTT WELD
REV	BOTTOM
0	THICKNESS 3/8" (0" CA)
0	MATERIAL A36
0	SLOPE FLAT
0	WELD LAP WELD
REV	GRILLAGE
0	SIZE W 6x9
0	MATERIAL A992
0	SPACING 1'-2"
0	BRACING L2x2x3/16" EVERY 10'

SHELL - 1.00 JOINT EFFICIENCY										FOUNDATION LOADS		DRAWING STATUS			TOLERANCES		CUSTOMER:		JOBSITE:	
RING NO.	MATERIAL	SQUARED HEIGHT	NOMINAL THK	PRODUCT CALC THK	HYDRO THK	CORROSION ALLOWANCE	IMPACT TEST REQUIRED	PWHT REQUIRED	WIND SHEAR*	WIND MOMENT*	SEISMIC SHEAR*	SEISMIC MOMENT*	NO.	REVISION DESCRIPTION	BY	DATE	UNLESS OTHERWISE SPECIFIED	WESTMORELAND ADVANCED MATERIALS	MOJAVE, CA	
SR1	A516-70	7' - 11 1/2"	1.34"	1.3329"	0.2996"	0"	NOTE 6	NOTE 7	23.9 KIP	4272.7 FT-KIP	4219.9 KIP	72990.8 FT-KIP			LMD	05/01/2020	FRACTIONAL: ±1/16"			
SR2	A516-70	7' - 11 1/2"	0.81"	0.8027"	0.2374"	0"	NO	NOTE 7	24.2 KIP	115.1 KIP	440.8 KIP	27040.5 KIP			WA	05/14/2020	ANGULAR: ±0.5°			
SR3	A516-70	7' - 11 1/2"	0.601"	0.6070"	0.1753"	0"	NO	NOTE 7							WA	05/14/2020				
SR4	A516-70	7' - 11 1/2"	0.399"	0.5232"	0.1132"	0"	NO	NO							-	-				
SR5	A516-70	7' - 11 1/2"	0.375"	0.1972"	0.0510"	0"	NO	NO							-	-				
									OTHER LOADS											
									BEARING PRESSURE FROM HYDRO TEST	2457 PSF										
									BEARING PRESSURE FROM PRODUCT	4701 PSF										
										AS-BUILT										



PROJECT NO.: 20WAM01A	DRAWING NO.: G100	SHEET: 1 OF 1	REV: 0
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