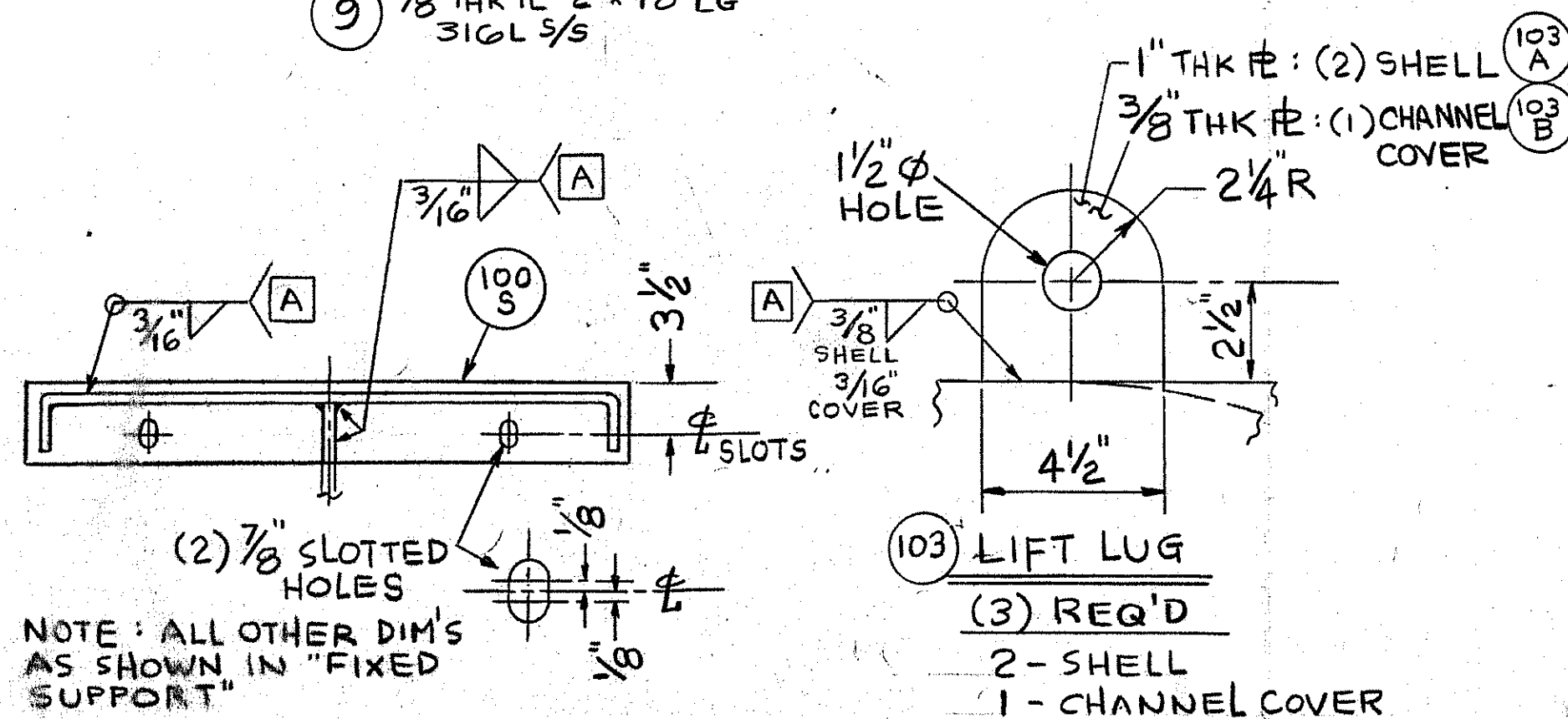
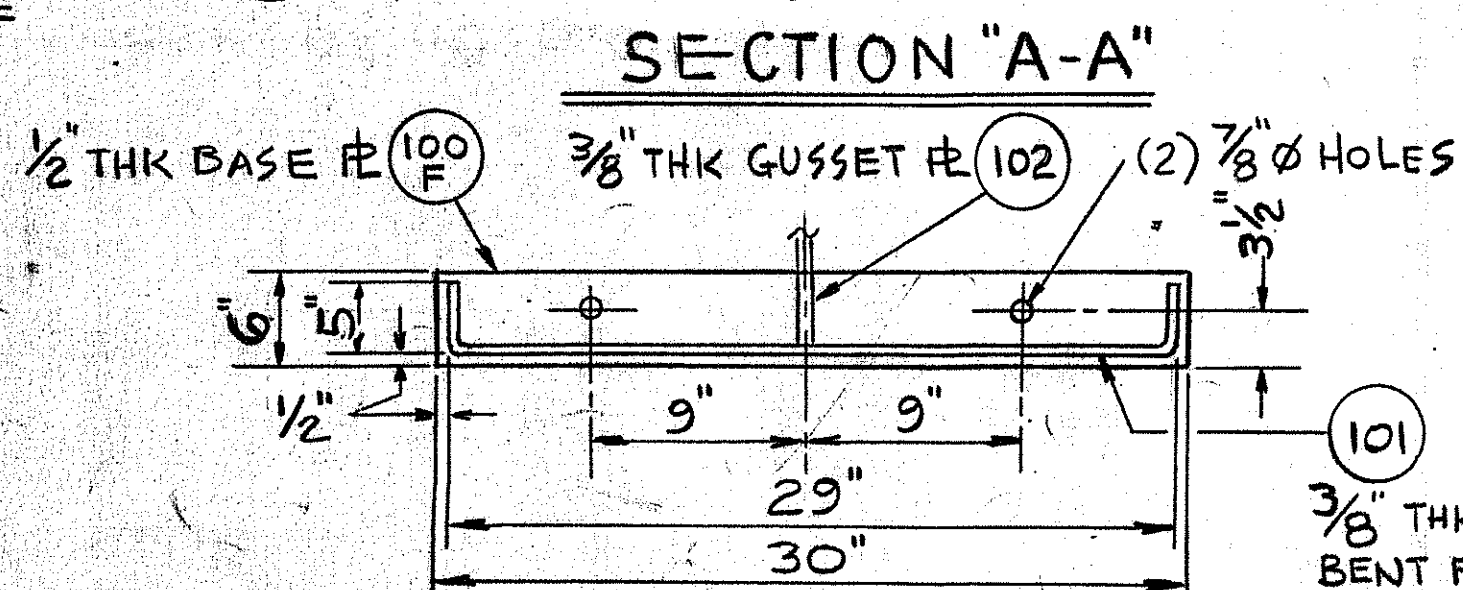
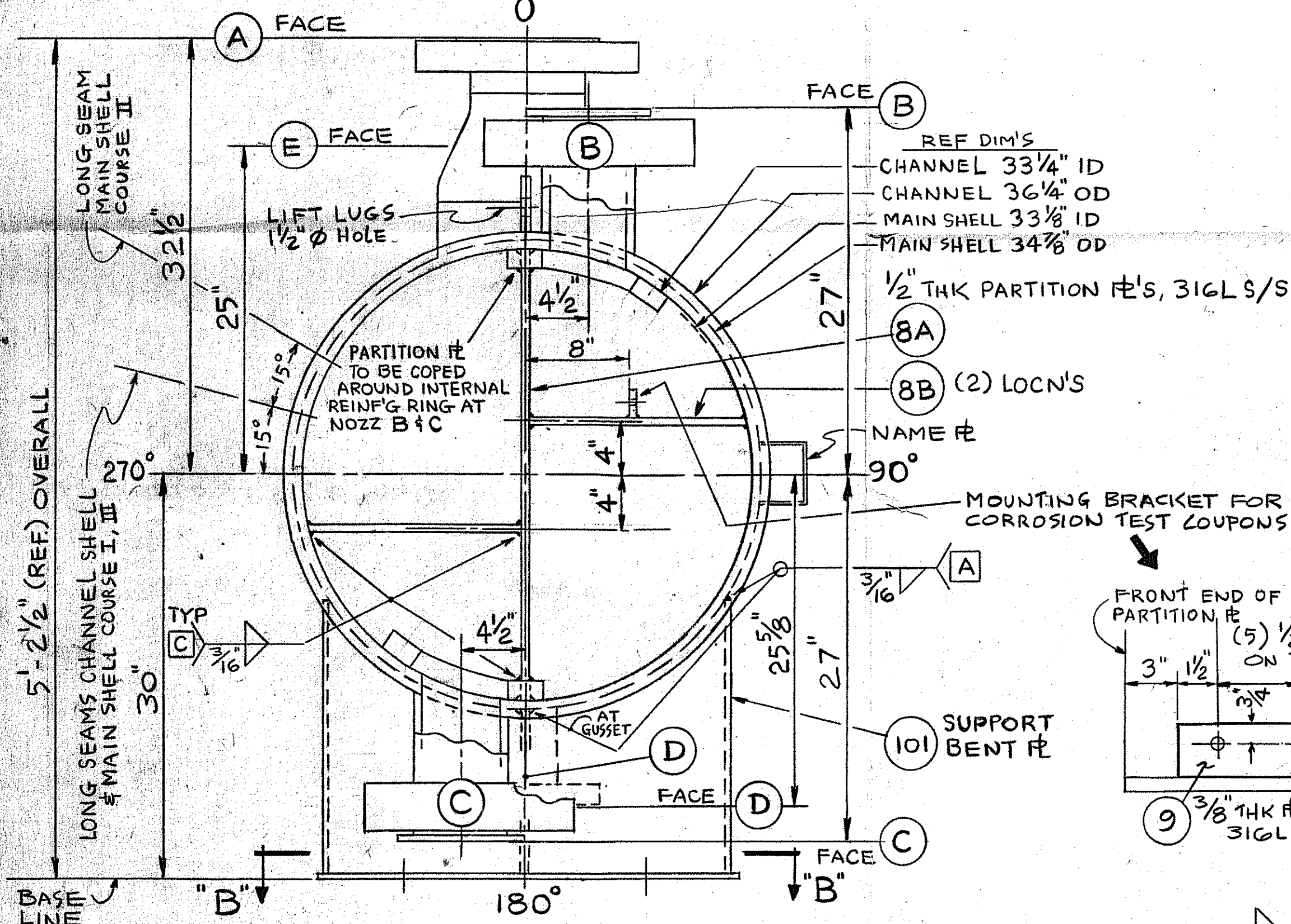
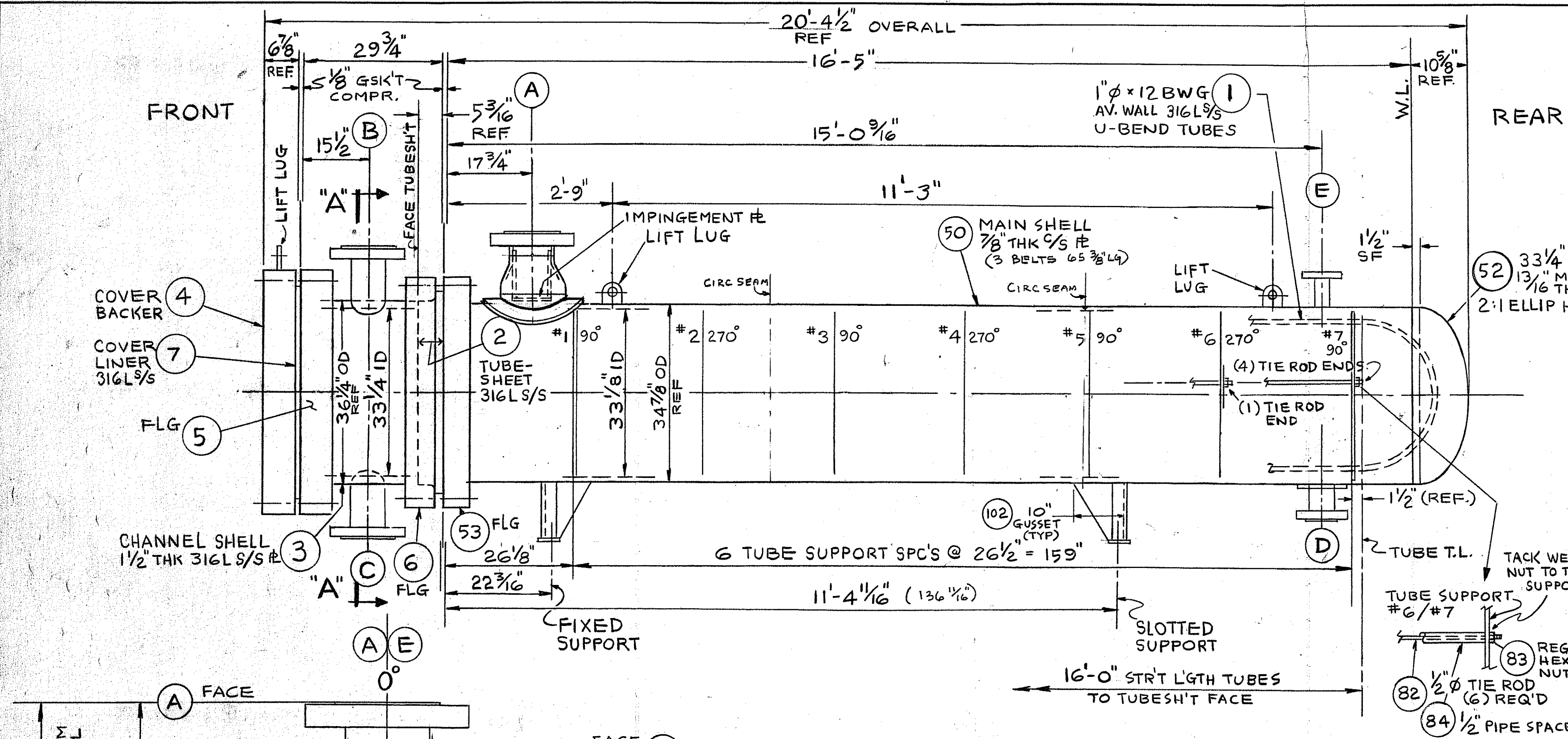




NOZZLE SCHEDULE					
MARK	SIZE	SCH	RATING	PURPOSE	REMARKS
A	8"	X STRG	600# RF	STEAM INLET	S.O. FLG
B	6"		1500#	CHANNEL OUTLET	L.J. FLG
C	6"		1500#	CHANNEL INLET	L.J. FLG
D	4"	X STRG	600# RF	CONDENSATE OUTLET	S.O. FLG
E	2"	XX STRG	600# RF	SHELL VENT	S.O. FLG

GENERAL NOTES

1. SET OF SPARE GASKETS (204/205) TO BE SHIPPED LOOSE.
2. BOLT HOLES OF WELDED FLG'S TO STRADDLE NORMAL VESSEL C/S

GENERAL TEST/INSPECTION NOTES

4. HYDROTEST PER SP-1584 (2 HR HOLD)
5. AIR TEST REINFG PADS PER SP-1583

WELDS INSPECTION NOTES

6. [P] LIQUID PENETRANT EXAMINE PER SP-1580
7. [R] FULL RADIOGRAPH TO EXTENT REQD PER SP-1581
8. [R] SPOT RADIOGRAPH TO EXTENT REQD PER SP-1581

WELDING PROCEDURES

9. (a) BEVELS:

TYP. BEVELS WITH 1/16" LAND UNLESS OTHERWISE NOTED

- (b) ROOTS: ALL ROOT OPNG'S 1/8" UNLESS OTHERWISE NOTED

- [A] C/S - C/S WPS-4101 w/E7018; WPS-4102 w/E7024
WPS-6102 w/E71T-1; WPS-7102 w/E70S-2
WPS-8101 w/ER70S-2
- [B] C/S - C/S WPS-5101 w/E7A2-EH14
- [C] S/S - C/S WPS-4305 w/E309; WPS-8301 w/ER309
- [D] S/S - S/S WPS-4303 w/E316L; WPS-7303 w/ER316L
WPS-8303 w/ER316L
- [E] S/S - S/S WPS-5301 w/ER316L
- [F] S/S - S/S WPS-8303 w/ER316L OR WPS-4303 w/E316L

VENDOR PRINT FILE 37085 WJ DATE 9-12-88	
SHEET 3	EQUIPMENT NOS E-4040-12
PROJECT & ACCOUNT NOS. 27-0121-1 4038	
PURCHASE ORDER NO. P65186	
PLANT CAPE INDUSTRIES	
REVIEWED DRAFTING DESIGN	
APPROVED ENGINEER C. Beam	

AUG 12 1988

CJB 8-5-88	TUBE SIDE TEMP 567°F WAS 550°F [A] ADDED TO [F] WPS-4303W/E316L	JIM THOMAS 8/10/88
HKN 6-13-88	REV WELDg PROCEDURE [D] ADDED WELDg PROCEDURE [E]	JLT JIM THOMAS 6-15-88
HKN 3-1-88	REV. PER CUST'S MARKED PRINT DATED 1-26-88 & SHOP COMMENTS. SHELL FLG THK REV. TO 7/8". REV. NOZZ B+C TO PIPE NECK & LIFT LUG	JIM THOMAS 3-8-88
DATE	REVISION	CHKD APPRVD

DESIGN DATA	SHELL SIDE	TUBE SIDE
APPLICABLE CODES	ASME SEC VIII DIV 1, WNTD '86 TEMA "B"	
DESIGN PRESSURE	650 PSIG	1180 PSIG
DESIGN TEMPERATURE	550°F	567°F
CORROSION ALLOWANCE	1/16"	NONE
BODY FLANGE FACE FINISH	125 SPIRAL RMS SERRATED	
RADIOGRAPHIC EXAMINATION	SPOT	FULL
HEAT TREATMENT	NONE	NONE
FINAL TEST PRESSURE	975 PSIG	1770 PSIG

MATERIAL

SHELL	SA-516 Gr70	SA-240-316L
HEADS, COVERS	SA-516 Gr70	SA-105
SHELL AND HEAD FLANGES	SA-105	SA-105
NOZZLE NECKS	SA-106 GrB	SA-312-316L
NOZZLE FLANGES	SA-105	SA-105
MANHOLE NECK		
REINFORCING PADS	SA-516 Gr70	SA-240-316L
TUBE SHEETS (FORG ING)		SA-182-F316L
TUBES		SA-249-316L
BAFFLES, TUBE SUPPORTS	A-36	
SPACERS	C/S	
TIE-RODS	C/S	
PARTITION PLATES		SA-240-316L
COUPLINGS		
GASKETS	SPIRAL-WOUND 316 SS & ASBESTOS	
BOLTS OR STUDS	SA-193-B7	
NUTS	SA-194-2H	
LONGITUDINAL BAFFLES		
IMPINGEMENT PLATE	304 S/S	
SUPPORTS	SA-36	
COVER LINER		SA-240-316L
LIFT LUGS	SA-36	

WEIGHT EMPTY 25,000#
WEIGHT FULL OF WATER 32,200#
PAINTING ONE SHOP COAT PRIMER ON ALL EXTERNAL C/S SURFACES. EXTERNAL S/S SURFACES SHALL BE PAINTED PER CUST'S SPEC 11CS-674 (CLEAN, AND APPLY 2 COATS BLACK SILICONE ENAMEL)

INSPECTION OAT, CUSTOMER AUTH. 1A
STAMPING ASME SEC. VIII DIV I
NOTE: BOLT HOLES SHALL STRADDLE THE NORMAL VESSEL CENTER LINES.
COMPANION DRAWINGS DETAILS E-8603 B.M. M-8604

JOSEPH OAT CORPORATION
CHEMICAL ENGINEERS/DESIGNERS/FABRICATORS
EST. 1788
CAMDEN, NEW JERSEY 08104

OUTLINE/ASSEMBLY
PTA WATER VAPORIZER PREHEATER
EQ No E-4040-12

FOR: CAPE INDUSTRIES WILMINGTON, N.C.	#104383
REF. NO.	JOB NO.
P.O. NO. 65186	J-8204-2
DRAWN: HKN	DATE: 1-7-88
CHECKED: JLT	DATE: 3/8/88
APPRVD. ENG/QC JIM THOMAS 1-25-88	DRAWING No. D-8602
APPRVD. APPRVD.	3