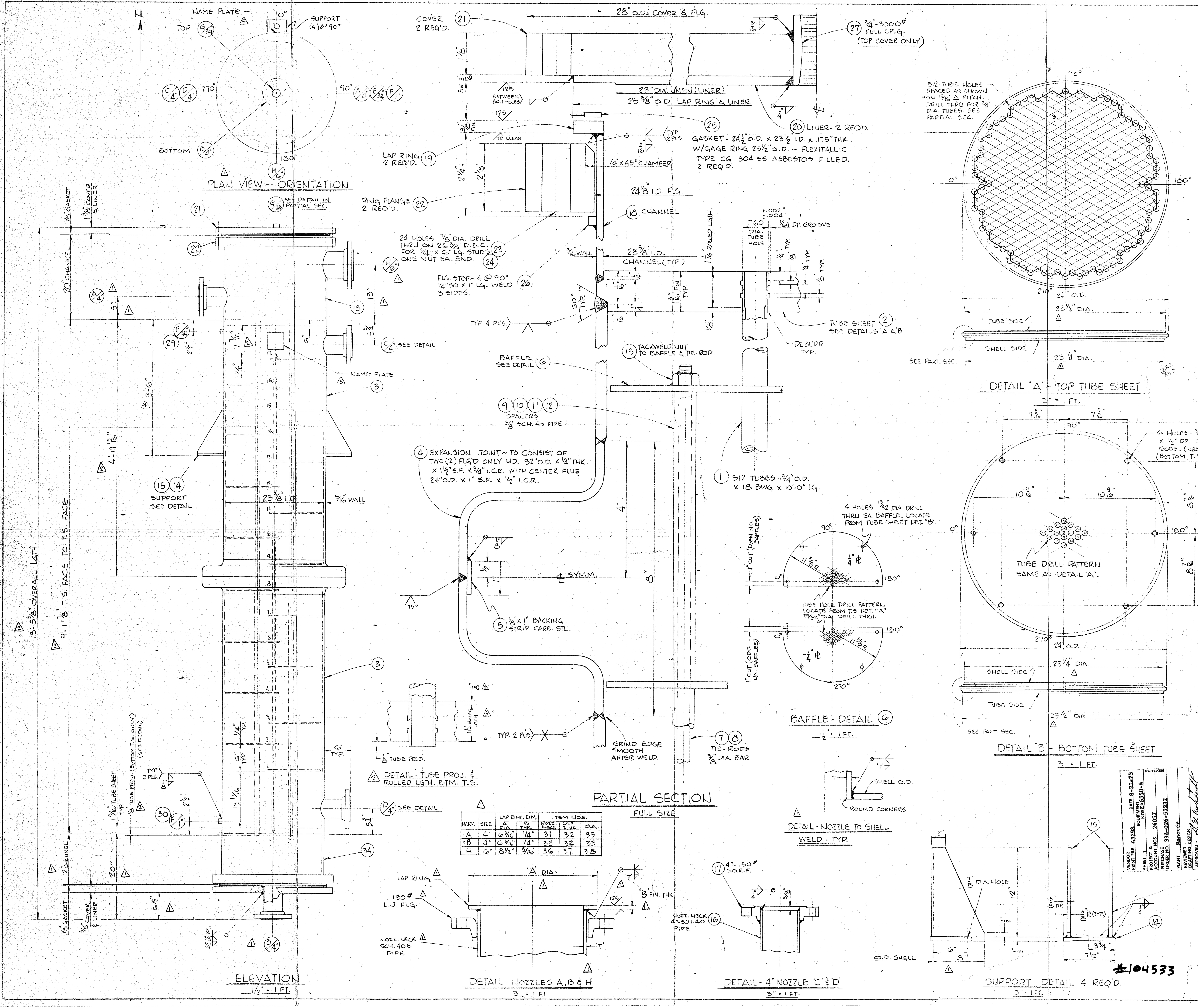

DESIGN DATA:	SHELL SIDE	TUBE SIDE
DESIGN AND FABRICATION	ASME CODE 1971 UFPV-SEC. VIII	ASME CODE 1971 TEMA C
DESIGN PRESSURE	175 PSIG	75 PSIG
DESIGN TEMPERATURE	375° F	375° F
CORROSION ALLOWANCE	1/16"	NONE
WELDING	UW-47	UW-47
FLANGE FACE FINISH	STOCK MODIFIED SPIRAL SERRATED	125 RMS
RADIOGRAPHIC EXAMINATION	SPOT	SPOT
HEAT TREATMENT	———	———
TEST PROCEDURE	UG99	UG99
FINAL TEST PRESSURE	262.5 PSIG	112.5 PSIG
MATERIAL:		
SHELL	SA 285 GR.C	SA 240-304
CHANNEL COVERS	———	SA 515-GR.70
SUPPORTS	SA 285 GR.C	———
NOZZLE NECKS	SA 53-GR.B	SA 240-304
MANHOLE NECK	———	———
COVER LINER & LAP RING	———	SA 240-304
NOZZLE FLANGES	SA181-GR II	SA181-GR.II
SHELL AND HEAD FLANGES	———	SA 515-GR.70
BOLTS	SA193-B7	SA193-B7
NUTS	SA194-2H	SA 194-2H
GASKETS FLEXITALLIC	———	SEE PART. SEC. AND NOTE. 1
TUBE SHEET	SA 240-304	SA 240-304
TUBES	———	SA249 TP304
BAFFLES	CARB. STL.	———
SPACERS & TIE-RODS	CARB. STL.	———
EXPANSION JOINT	SA285-GR.C	———
Δ1 COUPLINGS	SA105-GR.1	304 SS

TEST PRESSURE BASED ON 1½ x DESIGN PRESSURE x STRESS RATIO

WEIGHT EMPTY 4700 LBS

WEIGHT FULL OF WATER 7500 LBS.

OPERATING WEIGHT

PAINTING EXTERIOR C/S ONLY-ONE SHOP COAT/11CS-661

INSPECTION OAT - HERCULES - UNDERWRITER

STAMPING ASME CODE STAMP

ALL MANHOLE AND NOZZLE OPENINGS SHALL MEET THE REQUIREMENTS FOR REINFORCEMENT OF OPENINGS PER THE ASME CODE FOR UNFIRED PRESSURE VESSELS.

MANHOLES AND NOZZLES SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

~~MANHOLES~~ NOZZLES SEE NOZZ. SCH.

UNLESS OTHERWISE NOTED:
ALL BOTTOM NOZZLES SHALL BE FLUSH WITH INSIDE OF VESSEL. OTHER NOZZLES SHALL BE FLUSH

BOLT HOLES SHALL STRADDLE THE NORMAL VESSEL CENTER LINES.

NOZZLE SCHEDULE

MARK	SIZE	SCH.	FLANGE	PURPOSE	REMARKS
Δ1 A	4"	40S	150# LAP JOINT	VAPOR INLET	———
Δ1 B	4"	40S	150# LAP JOINT	LIQUID OUTLET	———
Δ1 C	4"	40	150# R.F.S.O.	BRINE OUTLET	———
Δ1 D	4"	40	150# R.F.S.O.	BRINE INLET	———
E	3/4"	3000#	HALF COUPLING	VENT	NPT W/PLUG
F	1"	3000#	HALF COUPLING	DRAIN	NPT W/PLUG
G	3/4"	3000#	FULL COUPLING	VENT	NPT W/PLUG
Δ1 H	6"	40S	150# LAP JOINT	SPRAY	

N/B # 650
Oat
Max Allowable Working Pressure
Shell Side 175 PSI @ 375°F
Tube Side 75 PSI @ 375°F
Mfg Ser# 2158-2
P.O. # 336-036-57732
Equip # E-6550-4
1973

DATE	Δ REVISION	BY
6-13-73	Δ5 ADDED NAME PLATE LOCATION, ELEV. & PLAN.	RWH
3-8-73	Δ4 ADDED 3'-6" SUPPORT LOCATION. PER HERCULES 3/8/73	RWH
3-1-73	Δ3 1 1/16" EXPANDED LGTH. WAS 15/16" BOTTOM T.S.	RWH
2-22-73	Δ2 ADDED 1/8" TUBE PROJ. BTM. T.S. & DETAIL. 9'-11 7/8" T.S. TO T.S. FACE WAS 10'-0". 4'-11 15/16" WAS 5'-0". 13'-5 3/8 OAL WAS 13'-5½". TO BAFFLE SPACE WAS 7½".	RWH
1-24-73	Δ1 DWG. REV. PER MARKED PRINT FROM HERC. -1-16-73. NOZZ. A WAS 12" - 5" WAS 8". ADDED NOZZ. H - 6" TO TOP CHANNEL @ 13". NOZZ. B WAS 12" LOCATED ON CHANN. SIDE. 12" WAS 20" LGTH. OVL WAS 13'-7". ADDED ORIENT, PLAN VIEW TUBE SHEETS & BAFFLES. ADDED DETAIL (NOZZ. TO SHELL WELD) ADDED NOZZ. 'H' TO NOZZ. DET. A-B. ADDED SIZE & ITEM NO. CHART. DET. A + B T.S. - 23½" D. WAS 23 5/8" & 23¼" D. WAS 23 3/8". DATA BLK. CPLG. 304 SS WAS 105 GR.1. NOZZ. SCH. A, B, C, D. PURP. BLK. REV. NOZZ. H WAS 1". SUPP. DET. 8" WAS 6" & 6" WAS 4".	RWH.
1-10-73	Δ0 ISSUED FOR APPROVAL	RWH

JOSEPH OAT & SONS, INCORPORATED
CHEMICAL ENGINEERS/DESIGNERS/FABRICATORS
ESTABLISHED 1788
CAMDEN, NEW JERSEY 08104

DMT LOADING CONDENSER
24" O.D. X 13'-5 3/8" O.A.L.
ONE PASS - C/S & 304 SS CONSTRUCTION
EQUIP. NO. E-6550-4 ASSEMBLY & DETAILS
FOR
HERCULES INCORPORATED
HANOVER PLANT
WILMINGTON, N.C.

PURCHASE ORDER NO. #104533 NO. REQ'D. ONE

JOB NO.	DRAWN: RHolmes	DRAWING NO.	REV.
J-2158-2	DATE: 1-10-73	5336	5
	CHECKED: W.J.C.		