

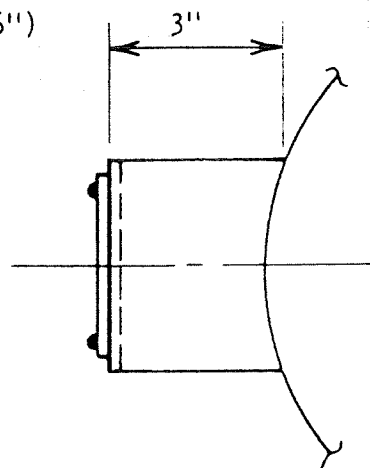
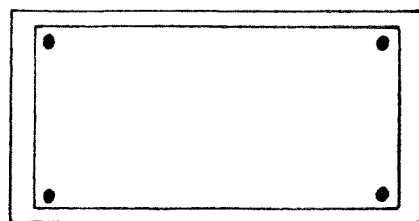
 W RT3	NATIONAL BOARD SERIAL NO. LATER		
	CERTIFIED BY:  BEAUMONT, TX		
	M.A.W.P. 100 P.S.I. AT 377 °F	TUBE SIDE	
	M.A.W.P. 148 P.S.I. AT 400 °F	SHELL SIDE	
MIN. DESIGN METAL TEMP. -20 °F AT 96 P.S.I. TUBE SIDE			
MIN. DESIGN METAL TEMP. -20 °F AT 133 P.S.I. SHELL SIDE			
MANUFACTURER'S SERIAL NO. 7840			
YEAR BUILT 1992		ITEM NO. E-1531	
PURCHASE ORDER NO. 16361 R			
SIZE 46-240		WEIGHT LBS. 38.000	
TEST PRESSURE P.S.I. 171 (NEW & COLD)			TUBE SIDE
TEST PRESSURE P.S.I. 279 (NEW & COLD)			SHELL SIDE

EXELL, INC. CODE NAME PLATE

NAME PL: TYPE 302 STNLS. STL. (4"x6")

BRACKET: SA-3C

ALL BRACKET WELDS TO BE C.W.



NAME PL BRACKET

CERTIFIED



CUSTOMER: PD GLYCOL (OXYCHEM)

CUSTOMER'S PURCHASE ORDER NUMBER: 16361 R

SERVICE: SECOND EFFECT REBOILER

TUBE SURFACE PER EXCHANGER: 7700 SQUARE FEET (EXTERNAL)

BOLT HOLES TO STRADDLE MAJOR CENTER LINES UNLESS OTHERWISE NOTED.

COAT ALL EXTERNAL BOLTING WITH A WATERPROOF LUBRICANT (FULL LENGTH OF THREADS).

PROTECT FLANGE FACES FOR SHIPMENT AND PLUG ALL THREADED OPENINGS.

RADIOGRAPH: SPOT PER PARAGRAPH UW-52 ASME CODE SECTION VIII, DIV. 1 (SHELL & CHAN.)

POST WELD HEAT TREAT: NOT REQ'D.

A.S.M.E. CODE INSPECTION BY: HARTFORD STEAM BOILER INSPECTION & INSURANCE COMPANY

SURFACE PREPARATION: COMMERCIAL SANDBLAST

PAINT: PRIME: DUPONT LFT1125P HIGH SOLIDS EPOXY MASTIC COATING RED
OXIDE (5 MILS. MIN. D.F.T.)

INTERMEDIATE: DUPONT 25P HIGH SOLIDS EPOXY MASTIC (5 MILS. MIN. D.F.T.)

FINISH: DUPONT 326 SERIES IMRON POLYURETHANE ENAMEL (2 MILS. MIN. D.F.T.)

ALL LONGITUDINAL & CIRCUMFERENTIAL SEAMS TO BE WELDED PER WELD PROCEDURE: API-1-4 REV.0
MPI-1-3 REV.1

ALL NOZZLE & SUPPORT ATTACHMENTS TO BE WELDED PER WELD PROCEDURE: MPI-1-3 REV.1

M.A.W.P. (TUBE SIDE) LIMITED BY: CHANNEL COVER (NEW & COLD)

M.A.W.P. (SHELL SIDE) LIMITED BY: TUBESHEETS (NEW & COLD)

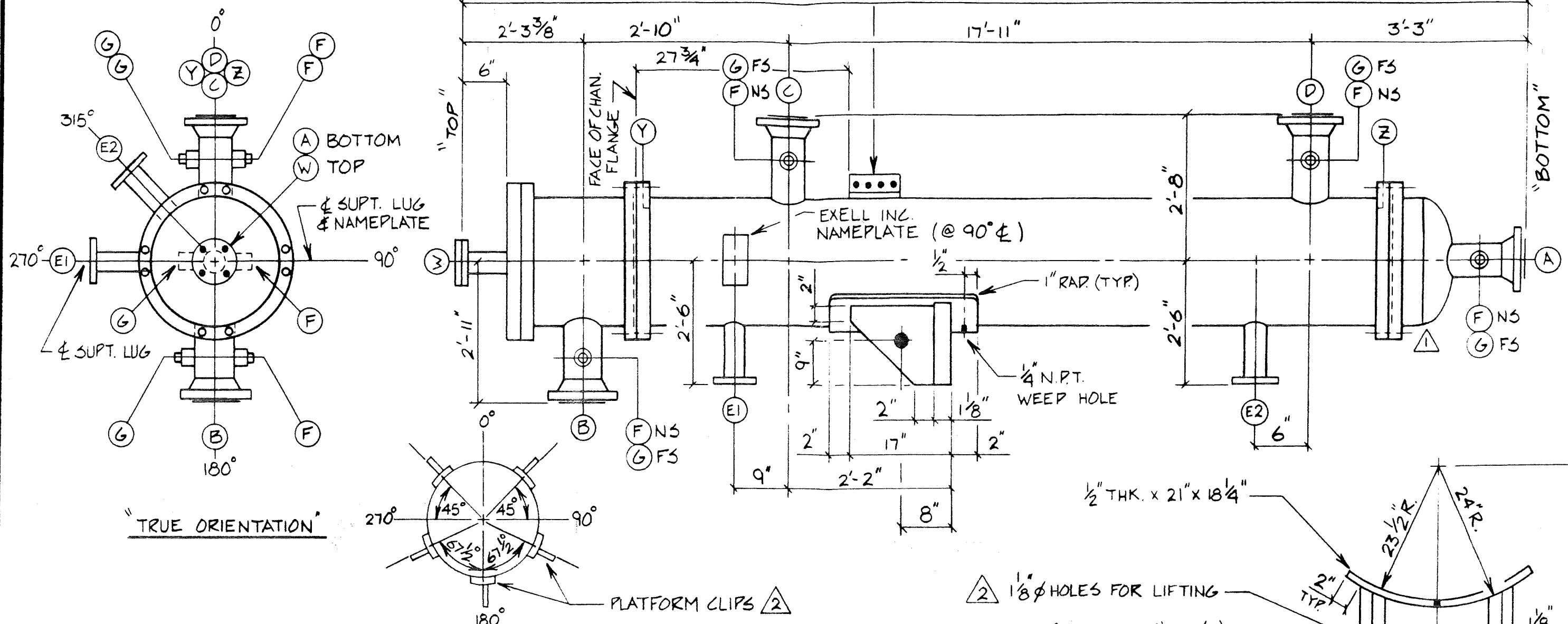
M.A.W.P. (TUBE SIDE) LIMITED BY: CHANNEL COVER (HOT & CORRODED)

M.A.W.P. (SHELL SIDE) LIMITED BY: TUBESHEETS (HOT & CORRODED)

WEIGHT EACH EXCHANGER	DRY: 38,000	WET: 53,200	BUNDLE ONLY: —
DESIGN CONDITIONS			CODES AND STANDARDS
DESIGN PRESSURE, P.S.I.	SHELLSIDE 133	TUBESIDE 96	ASME SECT. VIII PRESSURE VESSELS DIV. 1 STAMP YES, TEMA CLASS B
DESIGN TEMPERATURE, °F	400	377	
HYDRO TEST PRESSURE, P.S.I.	279	171	CUSTOMER SPECIFICATIONS: #1002001/H
M.A.W.P. (NEW & COLD) P.S.I.	186	114	
M.A.W.P. (HOT & CORR.) P.S.I.	148	100	
CORROSION ALLOWANCE, IN	.125	.125	
NUMBER OF PASSES	ONE	ONE	
REVISION:			GENERAL NOTES AND NAME PL
△ FOR APPROVAL			
△ REV SERVICES & CERT. 2-11-92 LEF	DR.'N.	GRI 12-16-91	NO. REQ'D. ONE TYPE: AEM
	CHK'D.	PG 1-11-92	ITEM NO. E-1531
	APP'D.	LEF 1-11-92	DWG. NO. 7840 SHEET 1 OF 11

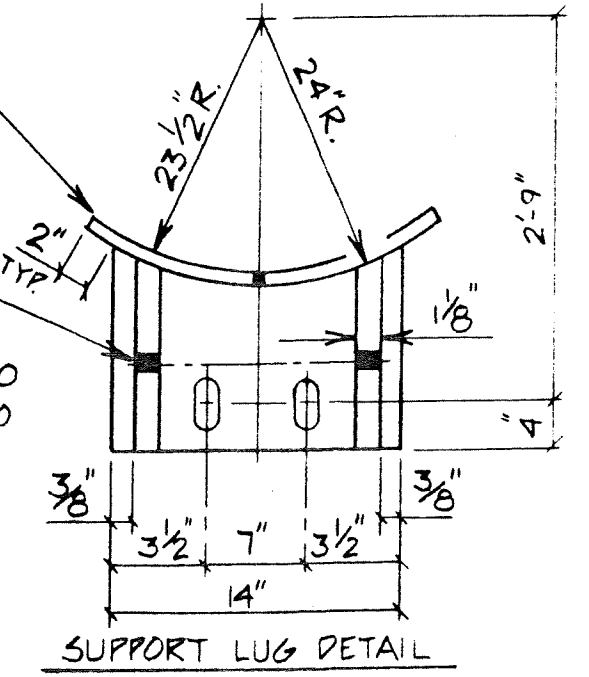
2 (5) PLATFORM SUPT. CLIPS REQ'D.
SEE DETAILS ON SHEET 4

26'-3 7/8" OVERALL



2 1 1/8\"/>

NO. LUGS REQ'D.: (2)
LUG MAT'L.: 1/8\"/>



G	4	1"	6000#	CPLG.	---	INST. CONN.	W/ 3" LG. PLUG
F	4	3/4"	6000#	CPLG.	---	INST. CONN.	W/ 3" LG. PLUG
Z	1	1/2"	---	N.P.T.	---	DRAIN	W/ 3" LG. PLUG
Y	1	1/2"	---	N.P.T.	---	VENT	W/ 3" LG. PLUG
W	1	1"	150#	RFLWN	AS SHOWN	VENT	W/ BLIND
E2	1	1"	150#	RFLWN	2'-6"	VENT	---
E1	1	1"	150#	RFLWN	2'-6"	VENT	---
D	1	6"	150#	RFWN	2'-8"	OUTLET	X- STG. BORE
C	1	8"	150#	RFWN	2'-8"	INLET	X- STG. BORE
B	1	16"	150#	RFWN	2'-11"	OUTLET	X- STG. BORE
A	1	8"	150#	RFWN	AS SHOWN	INLET	X- STG. BORE
MK.	NO. REQ'D.	SIZE	RATING	TYPE	PROJ. FROM CL	SERVICE	REMARKS

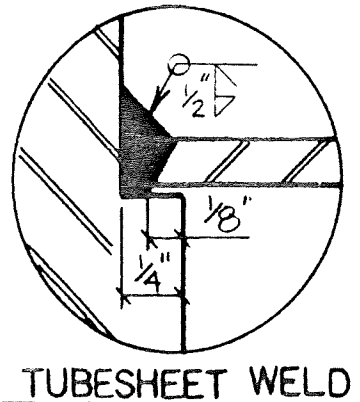
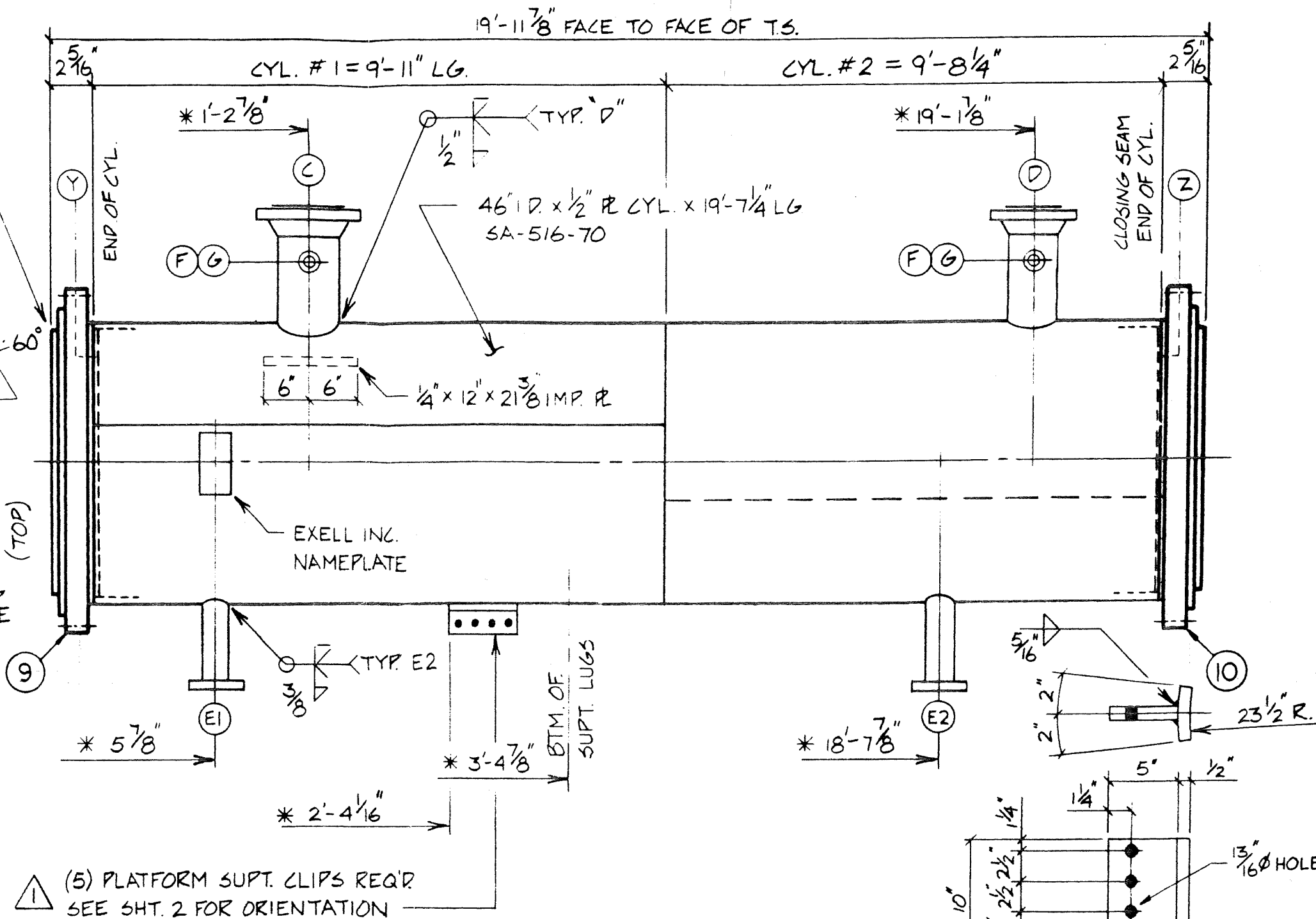
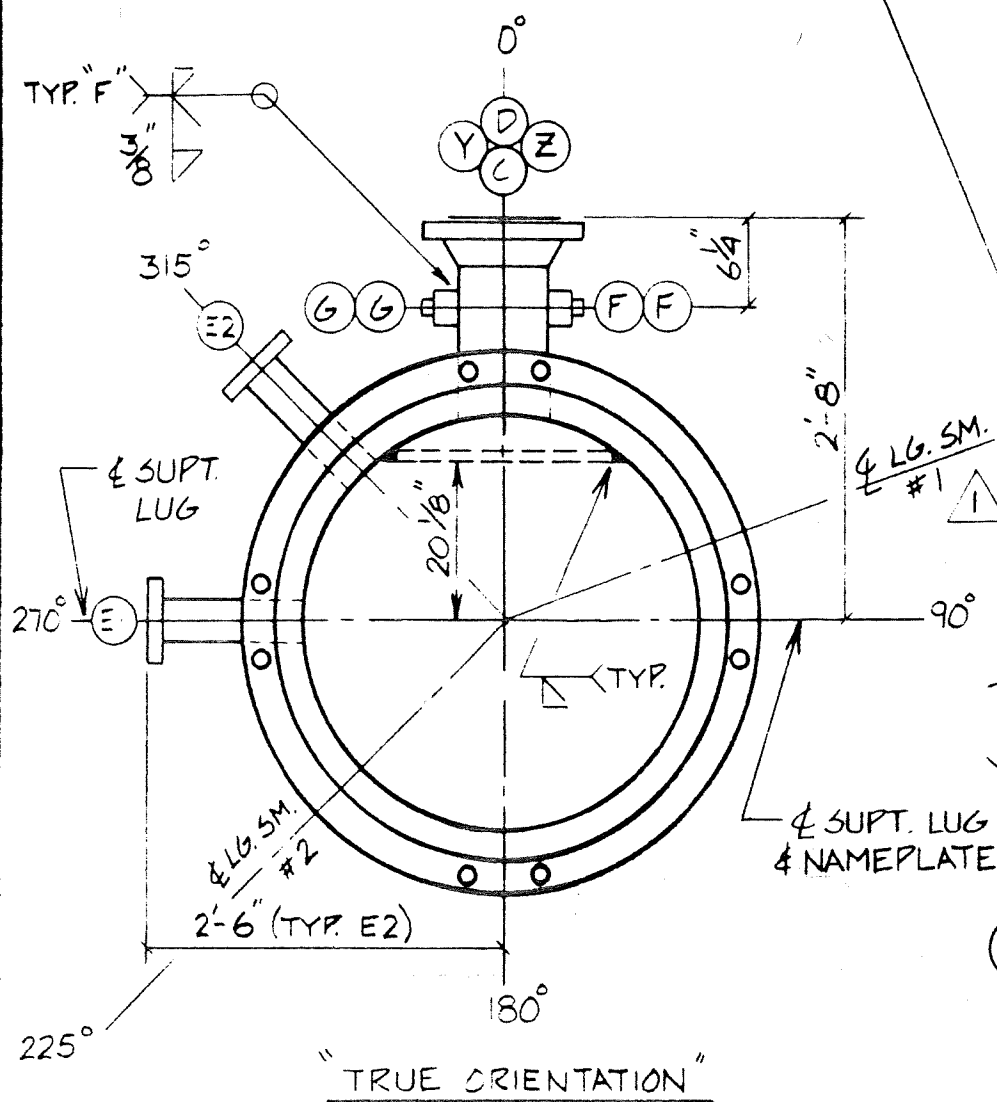
SCHEDULE OF OPENINGS

REV.
 1 FOR APPROVAL
 1 ADD BTM. CHAN. CYL.
 2 ADD LIFT HOLES & PLATFORM CLIPS 2-11-92 "CERTIFIED" LEF

EXELL, INC.			OUTLINE	
DRW'N.	GRI	12-10-91	NO. REQ'D. ONE	TYPE: AEM
CHK'D.	DG	1-11-92	ITEM NO. E-1531	
APV'D.	LEF	1-11-92	DWG. NO. 7840 SHT. 2 OF 11	

#1002669

ALL TAIL DIMENSIONS ARE TO
FACE OF TUBESHEET #9



G	1\"-6000* FULL CPLG. W/ 3\" LG. PLUG SA-105
F	3/4\"- 6000* FULL CPLG. W/ 3\" LG. PLUG SA-105
D	6\"-150* RFWN W/ X-STG. BORE, SA-105 6\" X-STG. (.432\") PIPE X 5 3/4\" LG., SA-106-B
C	8\"-150* RFWN W/ X-STG. BORE, SA-105 8\" X-STG. (.500\") PIPE X 5 7/16\" LG. SA-106-B
E1, E2	1\"-150* RFLWN X 7\" LG., SA-105

REV.
 △ FOR APPROVAL
 △ ADD PLATFORM CLIPS
 "CERTIFIED" 2-11-92 LEF

EXELL INC.			SHELL DETAIL	
DRW'N.	GRI	12-11-91	NO. REQ'D. ONE	TYPE: AEM
CHK'D.	DG	1-11-92	ITEM NO. E-1531	
APV'D.	LEF	1-11-92	DWG. NO. 7840	SHT. 4 OF 11

#100269

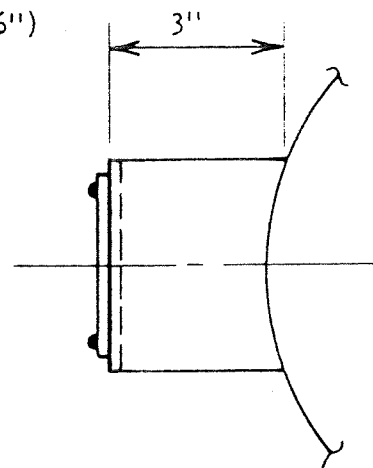
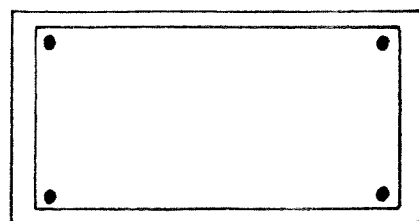
	NATIONAL BOARD SERIAL NO. LATER		
	CERTIFIED BY:  BEAUMONT, TX		
	M.A.W.P. 100 P.S.I. AT 377 °F	TUBE SIDE	
	M.A.W.P. 148 P.S.I. AT 400 °F	SHELL SIDE	
MIN. DESIGN METAL TEMP. -20 °F AT 96 P.S.I.		TUBE SIDE	
MIN. DESIGN METAL TEMP. -20 °F AT 133 P.S.I.		SHELL SIDE	
MANUFACTURER'S SERIAL NO. 7840			
YEAR BUILT 1992		ITEM NO. E-1531	
PURCHASE ORDER NO. 16361 R			
SIZE 46-240		WEIGHT LBS. 38,000	
TEST PRESSURE P.S.I. 171 (NEW & COLD)			TUBE SIDE
TEST PRESSURE P.S.I. 279 (NEW & COLD)			SHELL SIDE

EXELL, INC. CODE NAME PLATE

NAME PL: TYPE 302 STNLS. STL. (4"x6")

BRACKET: SA-3C

ALL BRACKET WELDS TO BE C.W.



NAME PL BRACKET

CERTIFIED

CUSTOMER: PD GLYCOL (OXYCHEM)

CUSTOMER'S PURCHASE ORDER NUMBER: 16361 R

SERVICE: SECOND EFFECT REBOILER

TUBE SURFACE PER EXCHANGER 7700 SQUARE FEET (EXTERNAL)

BOLT HOLES TO STRADDLE MAJOR CENTER LINES UNLESS OTHERWISE NOTED.

COAT ALL EXTERNAL BOLTING WITH A WATERPROOF LUBRICANT (FULL LENGTH OF THREADS).

PROTECT FLANGE FACES FOR SHIPMENT AND PLUG ALL THREADED OPENINGS.

RADIOGRAPH: SPOT PER PARAGRAPH UW-52 ASME CODE SECTION VIII, DIV. 1 (SHELL & CHAN.)

POST WELD HEAT TREAT: NOT REQ'D.

A.S.M.E. CODE INSPECTION BY: HARTFORD STEAM BOILER INSPECTION & INSURANCE COMPANY

SURFACE PREPARATION: COMMERCIAL SANDBLAST

PAINT: PRIME: DUPONT LFT1125P HIGH SOLIDS EPOXY MASTIC COATING RED

OXIDE (5 MILS. MIN. D.F.T.)

INTERMEDIATE: DUPONT 25P HIGH SOLIDS EPOXY MASTIC (5 MILS. MIN. D.F.T.)

FINISH: DUPONT 326 SERIES IMRON POLYURETHANE ENAMEL (2 MILS. MIN. D.F.T.)

ALL LONGITUDINAL & CIRCUMFERENTIAL SEAMS TO BE WELDED PER WELD PROCEDURE: API-1-4 REV.0
MPI-1-3 REV.1

ALL NOZZLE & SUPPORT ATTACHMENTS TO BE WELDED PER WELD PROCEDURE: MPI-1-3 REV.1

M.A.W.P. (TUBE SIDE) LIMITED BY: CHANNEL COVER (NEW & COLD)

M.A.W.P. (SHELL SIDE) LIMITED BY: TUBESHEETS (NEW & COLD)

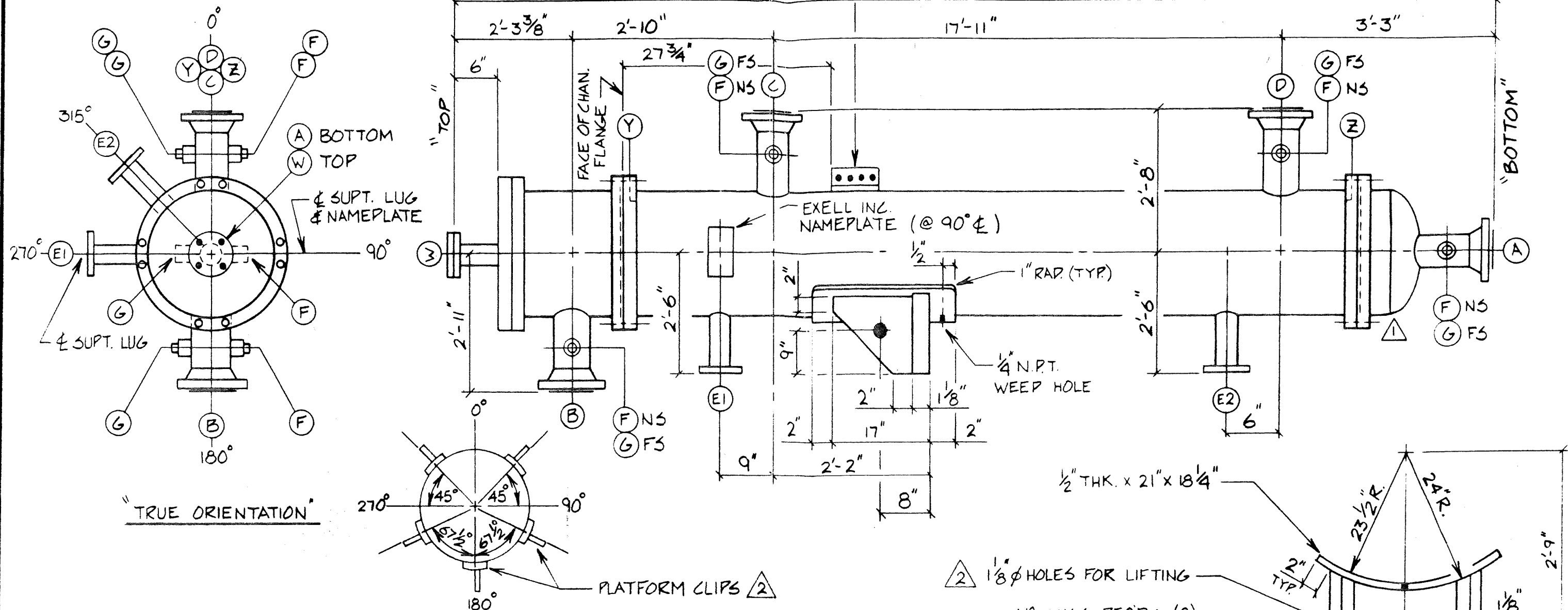
M.A.W.P. (TUBE SIDE) LIMITED BY: CHANNEL COVER (HOT & CORRODED)

M.A.W.P. (SHELL SIDE) LIMITED BY: TUBESHEETS (HOT & CORRODED)

WEIGHT EACH EXCHANGER		DRY: 38,000		WET: 53,200		BUNDLE ONLY: —	
DESIGN CONDITIONS					CODES AND STANDARDS		
DESIGN PRESSURE,		P.S.I.	SHELLSIDE	TUBESIDE	ASME SECT. VIII PRESSURE VESSELS		
DESIGN TEMPERATURE,		°F	400	377	DIV. 1 STAMP YES, TEMA CLASS B		
HYDRO TEST PRESSURE,		P.S.I.	279	171	CUSTOMER SPECIFICATIONS:		
M.A.W.P. (NEW & COLD)		P.S.I.	186	114			
M.A.W.P. (HOT & CORR.)		P.S.I.	148	100			
CORROSION ALLOWANCE,		IN	.125	.125			
NUMBER OF PASSES			ONE	ONE			
REVISION:					GENERAL NOTES AND NAME PL		
 FOR APPROVAL							
 REV SERVICES & CERT. 2-11-92 LEF							
DR'N.		GRI	12-16-91	NO. REQ'D. ONE		TYPE: AEM	
CHK'D.		PG	1-11-92	ITEM NO. E-1531			
APP'D.		LEF	1-11-92	DWG. NO. 7840		SHEET 1 OF 11	

2 (5) PLATFORM SUPT. CLIPS REQ'D.
SEE DETAILS ON SHEET 4

26'-3 7/8" OVERALL



2 1 1/8" Ø HOLES FOR LIFTING

NO. LUGS REQ'D.: (2)
LUG MAT'L.: 1 1/8" THK. SA-516-70
PAD MAT'L.: 1/2" THK. SA-516-70
WELD SIZE: 3/8" CONT. FILLET
SLOT SIZE: 1 1/8" x 2 1/4"

SUPPORT LUG DETAIL

G	4	1"	6000#	CPLG.	---	INST. CONN.	W/ 3" LG. PLUG
F	4	3/4"	6000#	CPLG.	---	INST. CONN.	W/ 3" LG. PLUG
Z	1	1/2"	---	N.P.T.	---	DRAIN	W/ 3" LG. PLUG
Y	1	1/2"	---	N.P.T.	---	VENT	W/ 3" LG. PLUG
W	1	1"	150#	RFLWN	AS SHOWN	VENT	W/ BLIND
E2	1	1"	150#	RFLWN	2'-6"	VENT	---
E1	1	1"	150#	RFLWN	2'-6"	VENT	---
D	1	6"	150#	RFWN	2'-8"	OUTLET	X- STG. BORE
C	1	8"	150#	RFWN	2'-8"	INLET	X- STG. BORE
B	1	16"	150#	RFWN	2'-11"	OUTLET	X- STG. BORE
A	1	8"	150#	RFWN	AS SHOWN	INLET	X- STG. BORE
MK.	NO. REQ'D.	SIZE	RATING	TYPE	PROJ. FROM CL	SERVICE	REMARKS

SCHEDULE OF OPENINGS

REV.

△ FOR APPROVAL

1 ADD BTM. CHAN. CYL.

2 ADD LIFT HOLES & PLATFORM CLIPS 2-11-92
"CERTIFIED" LEF

EXELL, INC.

OUTLINE

DRW'N.	GRI	12-10-91	NO. REQ'D. ONE	TYPE: AEM
CHK'D.	DG	1-11-92	ITEM NO. E-1531	
APV'D.	LEF	1-11-92	DWG. NO. 7840 SHT. 2 OF 11	