| | QUAN. | DWG. NO. | |
|---|---|---|---|
| 1 | 1 | D-30157 | COIL ASSEMBLY |
| 2 | 24 | B-30137 | STAT. BAFFLE SUPPORT |
| 3 | 2 | N.N. | BAFFLE SUPPORT ANGLE |
| 4 | 84 | N.N. | 3/8 NC CAP SCR. |
| 5 | 16 | N.N. | 3/8 NC LOCK WASHER |
| 6 | 16 | N.N. | 3/8 NC HEX NUT |
| 7 | 16 | N.N. | 3/8 FLAT WASHER |
| 8 | 2 | A-30144-A | FLANGED CONNECTION FOR COILS (1) |
| 9 | 1 | A-30166A | FLANGED CONN. FOR STEAM IN (9) |
| 10 | 1 | A-30168B | FLANGED CONN. FOR CONDS. OUT (10) |
| 11 | 1 | A- | FLANGED CONN. FOR DRAIN (11) |
| 12 | 2 | A- | FLANGED CONNECTION FOR JACKET |

NOTE: SECTION A A SHOWN ON DRAWING D-30157

WELDING NECK FLANGE (8) INLET (UPPER SECTION)

"A"

21" TYP.

1"-150# SLIP NECK FLANGE (9) STEAM INLET (RTM SECTION) FOR MELTING CONDENSATE TO EMPTY TRAP USE 40 PSI SATURATED STEAM

6"

21" TO E FLANGE

6"

21" TO E FLANGE

VACUUM GAUGE CONNECTION 1/4"-150# COUPLING

19" N.T.S.

COND. OUT 1" FLANGE

10 5/16"

45°

12"

DRAIN (4) (11)

COND. OUT (8)

90°

COIL IN (8)

2" TO E FLANGE

6"

8 3/8"

45°

21"

24" TO E

BOLT HOLES

6"

1" WELDING NECK FLANGE (8) COND. OUT (UPPER SECTION) FOR CONDENSING VAPORS NOT CONDENSED ON CONDENSER IN STILL BODY. USE +10°F BRINE SOLUTION

5'-0" (60")

4'-9" (57")

4'-1 3/8" (49 3/8")

2'-6" N.T.S.

7 3/4"

2 3/4"

COIL IN - JACKET COOLING (12)

1"-150# FLANGE WELDING NECK

1" TO 3/4" SCH 10 REDUCING TEE

1" PIPE SCH 10

3/4" PIPE SCH 10

3/4" LONG RADIUS ELBOW SCH 10

3/4" O.D. TUBING

6"

7

10"

3'-1"

1" PAD BETWEEN SUPPORT & STRUCTURAL SUPPORTS

(8) COIL OUT HEAD TO BE FLANGED WITH 1" WELDING NECK FLANGES FOR CONDENSING OF VAPORS NOT CONDENSED ON CONDENSER IN STILL BODY. USE +10°F BRINE SOLUTION

STEAM IN. (9) 1" SLIP NECK FLANGE

2 5/8"

(11) 2" FLANGE DRAIN LINE

(12) COIL OUT - JACKET COOL 1"-150# FLANGE, 1" TO 3/4" SCH 10 REDUCING TEE, 3/4" L.R. ELBOW SCH 10, 1" PIPE SCH 10, 3/4" O.D. TUBING

7

3

COND. OUT (10) 1" SLIP NECK FLANGE

FINAL ASSEMBLY 30" COLD TRAP

6" VACUUM

NOTE: SEE DRAWING C-30138B FOR DWG. OF LH TRAP

USE THIS FOR LEFT HAND TRAP (3 REQ'D) SEE C-30138B FOR RIGHT HAND TRAP ORIENTATION

WEIGHT EMPTY: 1170#

WEIGHT OPERATING: 1270#

1" INSULATION BY PURCHASER

PRINT MADE MAY 26 1971 ARTHUR G. McKEE & CO.

HOFFMANN LA ROCHE
PROJECT 66
BELVIDERE, N.J.
HLR ORDER No. E 280676B
McKEE P.O. MCK. 3726-57
POSITION: B3-3645 & B3-3649 & B3-3653 FOR LEFT HAND TRAP
B3-3646 & B3-3650 & B3-3657 FOR RIGHT HAND TRAP
McKEE DWG. No. 3600-5

| | |
|---|---|
| A 6-22-70 B 3" FLANGE ALL NOZZLES & LOCKS I.A.W. M.K. | ARTHUR G. McKEE & CO. CLEVELAND, OHIO |

#99631

| DET No | REQ'D. | DWG. No. | DESCRIPTION | SPEC'S. |
|---|---|---|---|---|
| 18 | 2 | 1" | COIL JACKET FLANGES | 304 SS |

| DET NO | REQ'D. | DWG NO. | DESCRIPTION |
|---|---|---|---|
| 1 | 1 | C-30153 | SHELL |
| 2 | 1 | | INNER SHELL |
| 3 | 120 LB | | COIL |
| 4 | 1 | B-30193 | TUBE SHEET |
| 5 | 2 | A-30194 | FLANGED CONNECTION (FLANGE) |
| 6 | 1 | C-30195 | COIL JACKET |
| 7 | 1 | | NN |
| 8 | 1 | A-30196 | PIPE CONNECTION - INCOMING LINE |
| 9 | 1 | C-30197 | INLET CAP CLOSES SHELL |
| 10 | 1 | B-30198 | OUTLET CAP CLOSES SHELL END |
| 11 | 1 | A-30199 | PIPE CONNECTION - OUTGOING LINE |
| 12 | 1 | A-30200 | DRAIN |
| 13 | 1 | A- | [illegible] |
| 14 | 2 | A-30202 | FLANGED CONNECTION |
| 15 | 1 | A-30203 | [illegible] |
| 16 | 1 | A- 301 | [illegible] |
| 17 | 2 | A- | COIL CONNECTOR |

SECTION A-A

21" TYP REF

STEAM IN (14)

COIL IN (5)

21" TYP REF

COND. OUT (14)

DRAIN (12)

45°

45°

45°

(5) COIL OUT

(15)

49 3/8" (4'-1 3/8")

71 1/2"

63"

60"

½

5 5/8

7/8"

2 3/4

1"-150# FLANGE COIL JACKET IN (18)

17 PLATE

SUPPORT PLATE SEE DWG. C-30042

14

57" TO TOP FLANGE

2 3/8"

(18) 1"-150# FLANGE COIL & JACKET OUT

10"

INNER & OUTER SHELLS

CONNECTION BLOCK

COIL IN JACKET (3)

FLANGED CONNECTION 14

COIL IN JACKET

FLANGED CONNECTION (5)

(17)

.310

.209

.201

VIEW OF CONNECTION BETWEEN OUTER & INNER SHELLS

COIL TRAP WELDMENT - 2 REQ'D.

SCALE 1/4"

USE THIS DRAWING WITH LEFT HAND TRAP (2 REQ'D.)

SEE DRAWING NO. C-30158C FOR RIGHT HAND TRAP (2 REQ'D.)

NEXT ASSEMBLY D-30138-B D-30157-B

HOFFMANN LA ROCHE

PROJECT 66

BELVIDERE, N.J.

H.L.R. ORDER NO. E-280678

MAKER P.O. MAK 3728-57

POSITION

LEFT HAND TRAP

PRINT MADE

NOTE

1. ALL FLANGES FURNISHED 150# FLANGES, MSCP
2. MOUNTING BOLT HOLES STRADDLE
3. NOZZLES FOR 1" PIPE WELD O.D. MACH. FLANGE
4. NOZZLE #18 & #12 FOR 1" PIPE WELD FLANGE

FREEZE TRAP

| ITEM NO. | REQ'D | DWG. NO. | DESCRIPTION |
|---|---|---|---|
| 1 | 1 | | |
| 2 | 1 | | |
| 3 | 1 | N.A. | |
| 4 | 1 | N.A. | |
| 5 | 1 | | |
| 6 | 1 | | |
| 7 | 1 | | |
| 8 | 2 | A-3144A | FLANGED CONNECTION FOR COILS |
| 9 | 1 | A-3016RA | FLANGED CONN FOR STEAM IN |
| 10 | 1 | A-3016CB | FLANGED CONN FOR COND OUT |
| 11 | 1 | A- | FLANGED CONN FOR DRAIN |
| 12 | 2 | A- | FLANGED CONNECTION FOR JACKET |

NOTE: SECTION A-A SHOWN ON DRAWING C-3016 B

1" WELDING NECK FLANGE (8)
COIL INLET (Upper Section)

1" 150# SLIP NECK FLANGE (9)
STEAM INLET (Top Section)
FOR MELTING CONDENSATE
TO ENTER FROM
USE 40 PSI SATURATION
STEAM

VACUUM GAUGE CONNECTION
1/4" -150" COUPLING

COND. OUT
1" FLANGE

DRAIN (2) (11)

2" TO 6" FLANGE

1" WELDING NECK FLANGE (6)
COIL OUT (Upper Section)
FOR CONDENSING VAPORS NOT CONDENSED ON CONDENSER IN STILL BODY USE +10°F BRINE SOLUTION

BOLT HOLES 11/16 x 1 1/8" SLOTS TOWARD ℄

5'-0" (60")
4'-9" (57")
4-1 3/8" (49 3/8")
2'-6" N.T.S.

COIL IN - JACKET COOLING (12)

1" 150# FLARE WELDING NECK
1" TO 3/4" SCH 10 REDUCING TEE
1" PIPE SCH 10
3/4" PIPE SCH 10
3/4" LONG RADIUS ELBOW SCH 10
3/4" O.D. TUBING

(8) COIL IN & OUT HEAD TO BE FLANGED WITH 1" WELDING NECK FLANGES
FOR CONDENSING OF VAPORS NOT CONDENSED ON CONDENSER IN STILL BODY. USE +10°F BRINE SOLUTION

1" PAD BETWEEN SUMMERY & STRUCTURAL SUPPORTS

STEAM IN
(9) 1" SLIP NECK FLANGE

(11) 2" FLANGE DRAIN LINE

6" N.T.S.

(12) COIL OUT - JACKET COOL
1" 150# FLANGE, 1" TO 3/4" SCH 10 REDUCING TEE, 3/4" L.R. ELBOW SCH 10, 1" PIPE SCH 10, 3/4" O.D. TUBING

COND. OUT
(10) 1" SLIP NECK FLANGE

SEE DRAWING C-3016B FOR ELEVATION DIMENSIONS

USE THIS FOR LEFT HAND TRAP (3 REQ'D)
SEE C-3013BB FOR RIGHT HAND TRAP ORIENTATION!

WEIGHT EMPTY: 1170#
WEIGHT OPERATING: 1270#
INSULATION BY PURCHASER

HOFFMANN LA ROCHE
PROJECT 66
BELVIDERE, N.J.
HLR ORDER No. E-280676B
McKEE P.O. MCK. 3726-57
POSITION: B3-3645 & B3-3649 & B3-3656 FOR LEFT HAND TRAP
B3-3646 & B3-3650 & B3-3657 FOR RIGHT HAND TRAP
McKEE DWG No. 3600-5

PRINT MADE JUN 5 1971

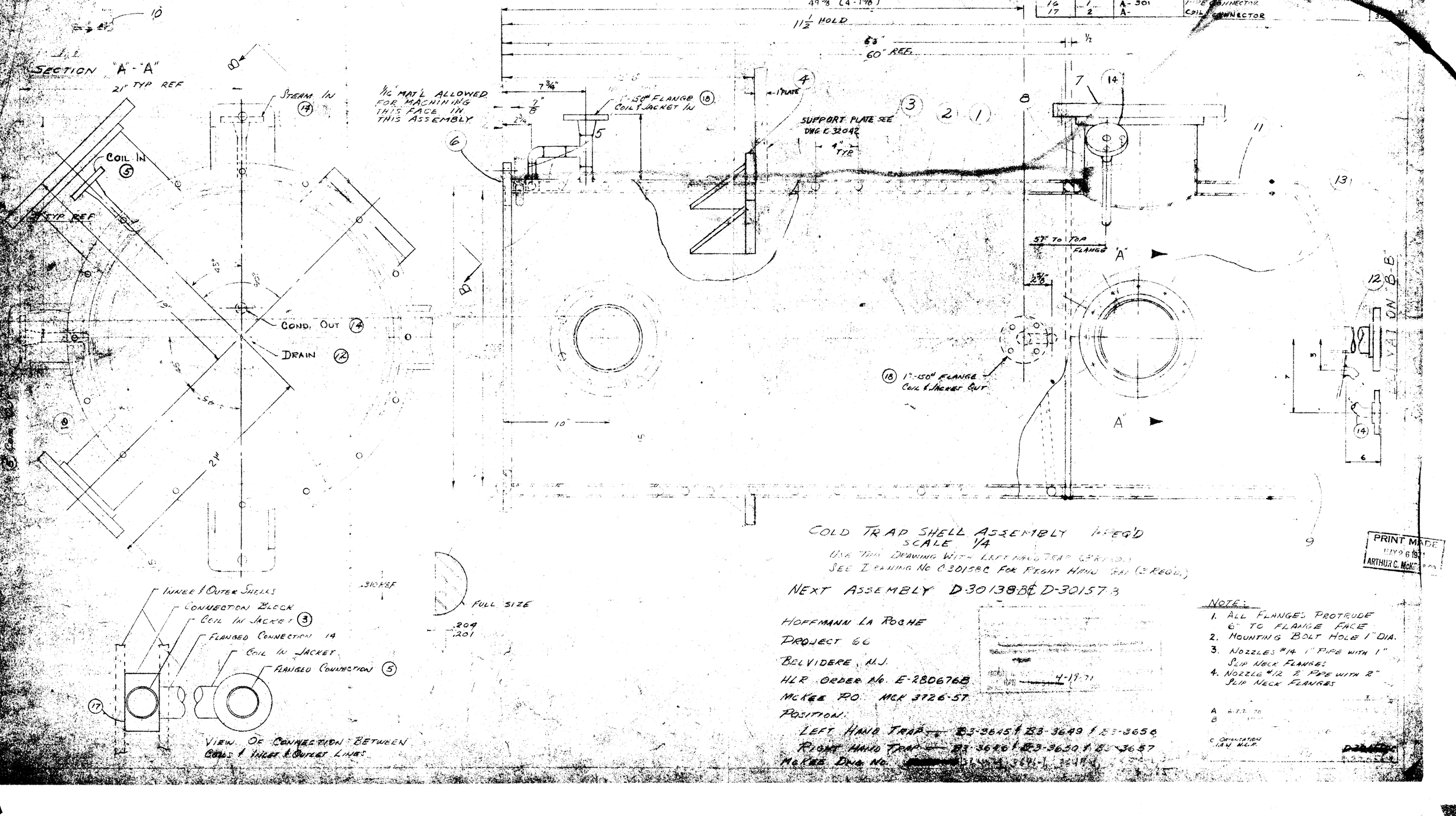
A 6-22-70 ARTHUR G. McKEE & CO.
8" FLANGE ADJ. NOZZLES & LOCATE I&W H.L.

| DET NO | REQ'D | DWG. NO. | DESCRIPTION | SPECS |
|---|---|---|---|---|
| 18 | 2 | 1 | COIL & JACKET FLANGES | 304 SS |

| DET NO | REQ'D | DWG. NO. | DESCRIPTION | SPECS |
|---|---|---|---|---|
| 1 | 1 | D-30159 | CYLINDER OUTER SHELL | |
| 2 | 1 | D-30160 | ASS. INNER CYLINDER | |
| 3 | 124 FT. | NN | TUBING | 304 SS |
| 4 | 4 | B-30143 | MOUNTING BRACKET | 304 SS |
| 5 | 2 | A-30144A | PIPE CONN. (1" FLANGE) | 304 SS |
| 6 | 1 | C-30145 | TOP FLANGE | 304 SS |
| 7 | 1 | NN | SLIP ON FLANGE 150# | |
| 8 | 1 | B-30146 | PIPE CONNECTOR | |
| 9 | 1 | C-30147 | WELDING CAP OUTER SHELL | |
| 10 | 1 | B-30148 | SIGHT GLASS HOUSING | |
| 11 | 1 | B-30156 | CYLINDER OUTER SHELL | |
| 12 | 1 | A-NN | 3" FLANGE CONNECTION | 304 SS |
| 13 | 1 | C-30154 | WELD CAP INNER SHELL | |
| 14 | 2 | A-30168A&B | 1" FLANGE CONNECTION | |
| 15 | 1 | NN | SLIP ON FLANGE | |
| 16 | 1 | A-301 | PIPE CONNECTOR | |
| 17 | 2 | A- | COIL CONNECTOR | |

NOTE
ALL WELDING TO BE ACCOMPLISHED PER ASME SPECIFICATIONS

SECTION "A"-"A"




COLD TRAP SHELL ASSEMBLY REQ'D
SCALE 1/4
USE THIS DRAWING WITH LEFT HAND TRAP (2 REQ'D.)
SEE DRAWING NO C-30158C FOR RIGHT HAND TRAP (2 REQ'D.)

NEXT ASSEMBLY D-30138B & D-30157B

HOFFMANN LA ROCHE
PROJECT 66
BELVIDERE, N.J.
HLR ORDER NO. E-280676B
McKEE P.O. MCK 3726-57
POSITION:
LEFT HAND TRAP — B3-3645 & B3-3649 & B3-3656
RIGHT HAND TRAP — B3-3646 & B3-3650 & B3-3657
McKEE DWG NO. [redacted]

4-19-71

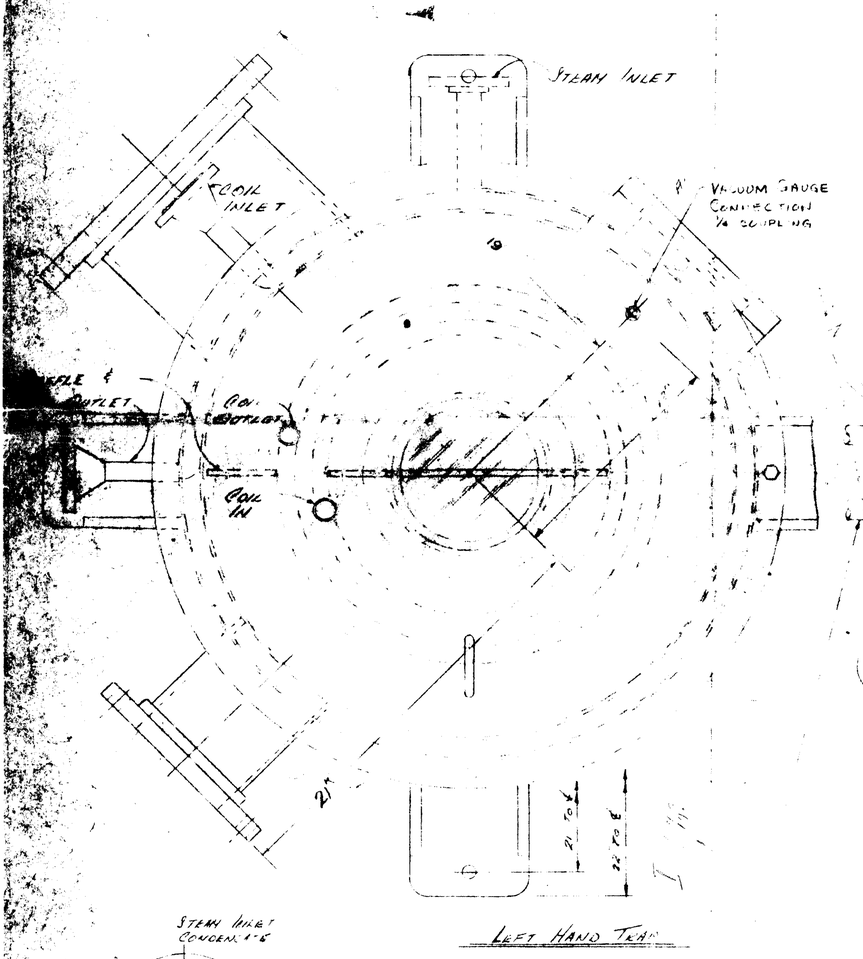
NOTE:
1. ALL FLANGES PROTRUDE 6" TO FLANGE FACE
2. MOUNTING BOLT HOLE 1" DIA.
3. NOZZLES #14 1" PIPE WITH 1" SLIP NECK FLANGES
4. NOZZLE #12 2 PIPE WITH 2" SLIP NECK FLANGES

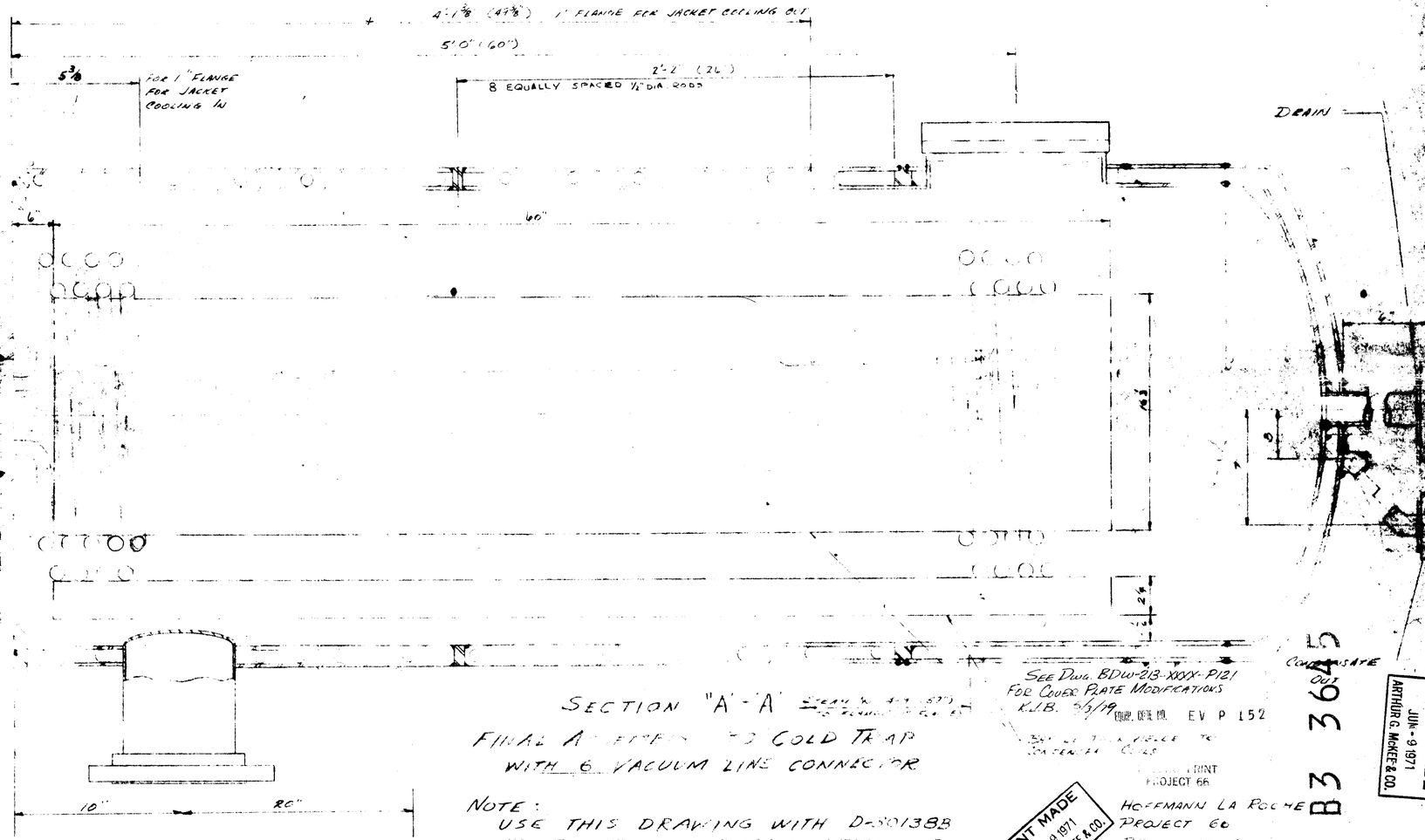
A 6-22-70
B 1-11-71
C ORIENTATION I.A.W. M.L.P.

PRINT MADE
NOV 9 6 19[illegible]
ARTHUR C. McKEE

| OF NO. | REQ'D | DWG. NO. | DESCRIPTION |
|---|---|---|---|
| 2 | 2 | D-501388 | COIL IN & THIMBLE ASSEMBLY |
| 3 | 3 | N.N. | FLAT RING 20½ OD 13½ ID 7/16 THK |
| 4 | 3 | D-501388 | 10" SCH 10 PIPE 20" LONG W/ 1" THK FLANGE |

NOTE:
- ALL FLANGES WILL EXTEND 6" TO FLANGE FACE
- WELD NECK FLANGES (1") WILL BE USED ON COILS IN JACKET & THIMBLE, & STEAM LINE
- SLIP-ON FLANGES WILL BE USED ON DRAIN & CONDENSATE LINE.




SECTION "A-A"

FINAL ASSEMBLY - COLD TRAP WITH 6 VACUUM LINE CONNECTOR

NOTE:
USE THIS DRAWING WITH D-501388
USE THIS DRAWING TO SET NOZZLE ORIENTATION
ROTATE NOZZLE AS REQUIRED FOR CLEARANCE
BAFFLE SETTING ACCORDING TO NOZZLE ORIENTATION
IN COIL ALWAYS WITH TEN INCH GAP

SEE DWG. BDW-218-XXX-P121 FOR COVER PLATE MODIFICATIONS
K.I.B. 5/3/19

ORDER NO. EV P 152

PRINT PROJECT 66

PRINT MADE JUN-9 1971 ARTHUR G. McKEE & CO.

HOFFMANN LA ROCHE
PROJECT 66
BELVIDERE N.J.
H.L.R. ORDER No. E-280676 B
McKEE P.O. MCK 3726-57
POSITION
LEFT - B3-3645 / B3-3649 / B3-3656
RIGHT - B3-3646 / B3-3650 / B3-3657

B3 3645

RESTRICT PRESSURES ON STEAM JACKET AND COOLING JACKET TO 80 psi.

STEAM INLET CONDEN. 1"-6
RT HAND ORIENTATION
SIGHT GLASS
10" FLANGE COIL INLET (SHELL)
COIL (TON A) INLET / OUTLET
BAFFLE
COIL OUTLET (SHELL)

- FLANGED 6 ABOVE TOP PLATE
USE 1" WELDING NECK FLANGE
SEE DWG No. D-501388

A - 6-22-70
B - ORIG. DATE
REVISED NOZZLE ORIENTATION
1-20-71

EVP-152