

## Approved

BILL OF MATERIALS       QUAR     PC MR     DESCRIPTION     MATL     SUMC     WEIGHT       1     M     24" API 650 SHELL MANNAY */ DAVIT     -     <			1				-
COUNT     PE     MM     C     MD     ME     NO     ME     ME     NO     ME     M			BILL OF MATERIALS				
1     5-1     PL 3/8" x 8 15/16" x 6'-2 1/4"     SA-36     P28     70       1     5-2     FLANGE 24" 150# RFS0     SA-105     22     220       1     5-3     BLIND FLANGE 24" 150# RF     SA-105     23     430       1     5-4     PL 1/2" x 2 3/4" x 0'-8"     SA-36     P29     3       1     5-5     PL 1/4" x 2 1/4" DIA     SA-36     P30     1       1     5-6     1/2" % ROD x 1'-0"     SA-36     31     1       2     5-7     1/2" % ROD x 1'-0"     SA-36     31     1       1     5-8     PIP2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM     SA-36     31     1       1     5-9     PIPE 3 SCH 40 x 1'-0"     SA-53 B     32     28       1     5-9     PIPE 3 SCH 40 x 0'-0 1/2"     SA-53 B     33     7       1     5-10     PIPE 3" SCH 40 x 0'-0 1/2"     SA-193-B7     35     55       40     5-12     1 1/4"ø HEX NUT     SA-194-2H     36     19       1     5-13     1/2"ø	QUAN	Pc MK	DESCRIPTION	MAT'L		WEIGHT	
1     5-2     FLANGE 24" 150 # RFS0     SA-105     22     220       1     5-3     BLIND FLANGE 24" 150 # RF     SA-105     23     430       1     5-4     PL 1/2" x 2 3/4" x 0'-8"     SA-36     P29     3       1     5-5     PL 1/4" x 2 1/4" DIA     SA-36     P30     11       1     5-6     1/2" % RD x 1'-0"     SA-36     31     11       2     5-7     1/2" % RD x 1'-0"     SA-36     31     11       1     5-8     PIPE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM     SA-53 B     32     28       1     5-9     PIPE 3" SCH 40 x 1'-0"     SA-53 B     33     7       1     5-9     PIPE 3" SCH 40 x 0'-0 1/2"     SA-53 B     34     11       20     5-11     1 1/4" 6 STUD BOLT x 0'-7 1/2"     SA-53 B     34     11       21     5-10     PIPE 3" SCH 40 x 0'-0 1/2"     SA-103     SA     11       20     5-11     1 1/4" 6 STUD BOLT x 0'-7 1/2"     SA-133     35     55       40     5-12	1	м	24" API 650 SHELL MANWAY w/ DAVIT	-	-	-	
1     5-3     BLIND FLANGE 24" 150# RF     SA-105     2.3     4.30       1     5-4     PL 1/2" x 2 3/4" x 0'-8"     SA-36     P29     3       1     5-5     PL 1/4" x 2 1/4" DIA     SA-36     P30     1       1     5-6     1/2" Ø ROD x 1'-0"     SA-36     31     1       2     5-7     1/2" Ø ROD x 1'-0"     SA-36     31     1       1     5-8     PIPE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM     SA-36     31     1       1     5-9     PIPE 3" SCH 40 x 1'-0"     SA-36     33     7       1     5-10     PIPE 3" SCH 40 x 0'-0 1/2"     SA-53 B     33     7       1     5-12     1 1/4" Ø IND BOLT x 0'-7 1/2"     SA-193-B7     35     55       40     5-12     1 1/4" Ø HEX NUT     SA-194-2H     36     19       1     5-13     1/2" Ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT     SS     38     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     <	1	5-1	PL 3/8" x 8 15/16" x 6'-2 1/4"	SA-36	P28	70	
1     5-4     PL 1/2" x 2 3/4" x 0'-8"     SA-36     P29     3       1     5-5     PL 1/4" x 2 1/4" DIA     SA-36     P30     1       1     5-6     1/2" ROD x 1'-0"     SA-36     31     1       2     5-7     1/2" ROD x 1'-0"     SA-36     31     1       1     5-8     PIPE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM     SA-36     31     1       1     5-9     PIPE 3" SCH 40 x 1'-0"     SA-36     33     7       1     5-9     PIPE 3" SCH 40 x 0'-0 1/2"     SA-53 B     33     7       1     5-10     PIPE 3" SCH 40 x 0'-7 1/2"     SA-53 B     34     1       20     5-11     1 1/4" STUD BOLT x 0'-7 1/2"     SA-193-B7     35     55       40     5-12     1 1/4" PIEX NUT     SA-194-2H     36     19       1     5-13     1/2" PIPE 8" SUL X 8" w/ (1) WASHER & HEX NUT     SS     38     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-	1	5-2	FLANGE 24" 150# RFSO	SA-105	22	220	
1     5-5     PL 1/4" x 2 1/4" DIA     SA-36     P30     1       1     5-6     1/2"\$ ROD x 1'-0"     SA-36     31     1       2     5-7     1/2"\$ ROD x 1'-0"     SA-36     31     1       1     5-8     PIFE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM     SA-53 B     32     28       1     5-9     PIFE 3" SCH 40 x 1'-0"     SA-53 B     33     7       1     5-9     PIFE 3" SCH 40 x 0'-0 1/2"     SA-53 B     33     7       1     5-10     PIFE 3" SCH 40 x 0'-0 1/2"     SA-53 B     34     1       20     5-11     1 1/4"\$ STUD BOLT x 0'-7 1/2"     SA-193-B7     35     55       40     5-12     1 1/4"\$ STUD BOLT x 0'-7 1/2"     SA-194-2H     36     19       1     5-13     1/2"\$ EYE BOLT x 8" w/ (1) WASHER & HEX NUT     CS     37     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10	1	5-3	BLIND FLANGE 24" 150# RF	SA-105	23	430	
1   5-6   1/2"ø ROD x 1'-0"   SA-36   31   1     2   5-7   1/2"ø ROD x 1'-0"   SA-36   31   1     1   5-8   PIPE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM   SA-53 B   32   28     1   5-9   PIPE 3" SCH 40 x 1'-0"   SA-53 B   33   7     1   5-9   PIPE 3" SCH 40 x 1'-0"   SA-53 B   33   7     1   5-10   PIPE 3" SCH 40 x 0'-0 1/2"   SA-53 B   34   1     20   5-11   1 1/4"ø STUD BOLT x 0'-7 1/2"   SA-193-B7   35   55     40   5-12   1 1/4"ø HEX NUT   SA-194-2H   36   19     1   5-13   1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT   CS   37   1     1   5-14   1/8"-27 NPT GREASE FIITING (ZERK TYPE)   SS   38   1     1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE   NOTE 1   39   10     1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE        1   E1   8" PUMP SUCTION	1	5-4	PL 1/2" x 2 3/4" x 0'-8"	SA-36	P29	3	
2     5-7     1/2"ø ROD x 1'-0"     SA-36     31     1       1     5-8     PIPE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM     SA-53 B     32     28       1     5-9     PIPE 3" SCH 40 x 1'-0"     SA-53 B     33     7       1     5-10     PIPE 3" SCH 40 x 0'-0 1/2"     SA-53 B     34     1       20     5-11     1 1/4"ø STUD BOLT x 0'-7 1/2"     SA-193-B7     35     55       40     5-12     1 1/4"ø HEX NUT     SA-194-2H     36     19       1     5-13     1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT     SS     37     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     E1     8" PUMP SUCTION           1     E2     8" PUMP SUCTION	1	5-5	PL 1/4" x 2 1/4" DIA	SA-36	P30	1	
2     5-7     1/2"Ø ROD x 1'-0"     SA-36     31     1       1     5-8     PIPE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM     SA-53 B     32     28       1     5-9     PIPE 3" SCH 40 x 1'-0"     SA-53 B     33     7       1     5-0     PIPE 3" SCH 40 x 1'-0"     SA-53 B     34     1       20     5-11     1 1/4"ø STUD BOLT x 0'-7 1/2"     SA-193-B7     35     55       40     5-12     1 1/4"ø HEX NUT     SA-194-2H     36     19       1     5-13     1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT     CS     37     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     I     -     -       1     51     SY 1/9" SUCTION     I     -     -     -       1     E1     8" PUMP SUCTION     I     -     -     -	1	5-6	1/2"ø ROD x 1'-0"	SA-36	31	1	
1     5-9     PIPE 3" SCH 40 x 1'-0"     SA-53 B     33     7       1     5-10     PIPE 3" SCH 40 x 0'-0 1/2"     SA-53 B     34     1       20     5-11     1 1/4"ø STUD BOLT x 0'-7 1/2"     SA-193-B7     35     55       40     5-12     1 1/4"ø HEX NUT     SA-194-2H     36     19       1     5-13     1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT     CS     37     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     E1     8" PUMP SUCTION     -     -     -       1     E2     8" PUMP SUCTION     -     -     -       1     E3     8" PUMP SUCTION     -     -     -       3     5-16	2	5-7	1/2"ø ROD x 1'-0"	SA-36	31	1	
1     5-10     PIPE 3" SCH 40 x 0'-0 1/2"     SA-53 B     34     1       20     5-11     1 1/4"ø STUD BOLT x 0'-7 1/2"     SA-193-B7     35     55       40     5-12     1 1/4"ø HEX NUT     SA-194-2H     36     19       1     5-13     1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT     CS     37     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     E1     8" PUMP SUCTION     -     -     -       1     E2     8" PUMP SUCTION     -     -     -       1     E3     8" PUMP SUCTION     -     -     -       1     E3     8" PUMP SUCTION     -     -     -       3     5-16     FLA	1	5-8	PIPE 2 1/2" SCH 80 x 3'-8 1/16" DAVIT ARM	SA-53 B	32	28	
20   5-11   1 1/4"ø STUD BOLT x 0'-7 1/2"   SA-193-B7   35   55     40   5-12   1 1/4"ø HEX NUT   SA-194-2H   36   19     1   5-13   1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT   CS   37   1     1   5-14   1/8"-27 NPT GREASE FITTING (ZERK TYPE)   SS   38   1     1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE   NOTE 1   39   10     1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE   NOTE 1   39   10     1   E1   8" PUMP SUCTION        1   E2   8" PUMP SUCTION        1   E3   8" PUMP SUCTION        3   5-16   FLANGE 8" 150# RFSO   SA-105   6   90     3   5-17   PIPE 8" SCH XS x 1'-4 7/8"   SA-53 B   7   183	1	5-9	PIPE 3" SCH 40 x 1'-0"	SA-53 B	33	7	
40     5-12     1 1/4"ø HEX NUT     SA-194-2H     36     19       1     5-13     1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT     CS     37     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     E1     8" PUMP SUCTION     -     -     -       1     E2     8" PUMP SUCTION     -     -     -       1     E3     8" PUMP SUCTION     -     -     -       1     E3     8" PUMP SUCTION     -     -     -       3     5-16     FLANGE 8" 150# RFSO     SA-105     6     90       3     5-17     PIPE 8" SCH XS x 1'-4 7/8"     SA-53 B     7     183	1	5-10	PIPE 3" SCH 40 x 0'-0 1/2"	SA-53 B	34	1	
1     5-13     1/2"ø EYE BOLT × 8" w/ (1) WASHER & HEX NUT     CS     37     1       1     5-14     1/8"-27 NPT GREASE FITTING (ZERK TYPE)     SS     38     1       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     5-15     GSK 1/8" THK FOR 20" - 150# FLANGE     NOTE 1     39     10       1     E1     8" PUMP SUCTION          1     E2     8" PUMP SUCTION          1     E3     8" PUMP SUCTION          1     E3     8" PUMP SUCTION          3     5-16     FLANGE 8" 150# RFSO     SA-105     6     90       3     5-17     PIPE 8" SCH XS x 1'-4 7/8"     SA-53 B     7     183	20	5-11	1 1/4"ø STUD BOLT x 0'-7 1/2"	SA-193-B7	35	55	
1   5-14   1/8"-27 NPT GREASE FITTING (ZERK TYPE)   SS   38   1     1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE   NOTE 1   39   10     1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE   NOTE 1   39   10     1   E1   8" PUMP SUCTION        1   E2   8" PUMP SUCTION       1   E3   8" PUMP SUCTION       3   5-16   FLANGE 8" 150# RFSO   SA-105   6   90     3   5-17   PIPE 8" SCH XS x 1'-4 7/8"   SA-53 B   7   183	40	5-12	1 1/4"ø HEX NUT	SA-194-2H	36	19	
1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE   NOTE 1   39   10     1   5-15   GSK 1/8" THK FOR 20" - 150# FLANGE   NOTE 1   39   10     1   E1   8" PUMP SUCTION        1   E1   8" PUMP SUCTION        1   E2   8" PUMP SUCTION        1   E3   8" PUMP SUCTION        3   5-16   FLANGE 8" 150# RFSO   SA-105   6   90     3   5-17   PIPE 8" SCH XS x 1'-4 7/8"   SA-53 B   7   183	1	5-13	1/2"ø EYE BOLT x 8" w/ (1) WASHER & HEX NUT	CS	37	1	
Image: Market	1	5-14	1/8"-27 NPT GREASE FITTING (ZERK TYPE)	SS	38	1	
1   E2   8" PUMP SUCTION   -   -   -     1   E3   8" PUMP SUCTION   -   -   -     3   5-16   FLANGE 8" 150# RFSO   SA-105   6   90     3   5-17   PIPE 8" SCH XS x 1'-4 7/8"   SA-53 B   7   183	1	5-15	GSK 1/8" THK FOR 20" - 150# FLANGE	NOTE 1	39	10	
1   E2   8" PUMP SUCTION   -   -   -     1   E3   8" PUMP SUCTION   -   -   -     3   5-16   FLANGE 8" 150# RFSO   SA-105   6   90     3   5-17   PIPE 8" SCH XS x 1'-4 7/8"   SA-53 B   7   183							
1 E3 8" PUMP SUCTION     3 5-16 FLANGE 8" 150# RFSO SA-105 6 90   3 5-17 PIPE 8" SCH XS x 1'-4 7/8" SA-53 B 7 183	1	E1	8" PUMP SUCTION	-	-	_	
3   5-16   FLANGE 8" 150# RFSO   SA-105   6   90     3   5-17   PIPE 8" SCH XS x 1'-4 7/8"   SA-53 B   7   183	1	E2	8" PUMP SUCTION	-	-	-	
3 5-17 PIPE 8" SCH XS x 1'-4 7/8" SA-53 B 7 183	1	E3	8" PUMP SUCTION	-	-	_	
	3	5-16	FLANGE 8" 150# RFSO	SA-105	6	90	
3   5-18   PIPE 8" SCH XS x 1'-4 7/16"   SA-53 B   7   178     M   M   M   M   M   M   M     M   M   M   M   M   M   M   M     M	3	5-17	PIPE 8" SCH XS x 1'-4 7/8"	SA-53 B	7	183	
Image:	3	5-18	PIPE 8" SCH XS x 1'-4 7/16"	SA-53 B	7	178	
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NOTE: 1. SPIRAL WOUND GASKET, TP304SS WINDING, GRAPHITE FILLER, TP204SS INNER RING, CS OUTER RING.

## RELEASE FOR FABRICATION 0 6/21/11 BW REV DATE DESCRIPTION BY REVISIONS CRAFTING TANKS SINCE 1905 CHATTANOOGA BOILER & TANK COMPANY CHATTANOOGA, TENNESSEE CUSTOMER SOUTHERN COMPANY SERVICES MISSISSIPPI POWER COMPANY OWNER P.O. NUMBER MPC10014582 STRUCTURE IDENTIFICATION FILTRATE DRUM CONTENTS THIS SHEET E1, E2, E3 & MANWAY "M" DRAWN BY: CHECKED BY: DATE: BW 6/14/11 EQUIPMENT NO: DR0002 DRAWING NO: 2084-01-05 PP'D. BY CHIEF ENG. APP'D. BY Q.C. MGR. Quality PLOT DISTRIBUTION LIST SHIPPING REF PRINT QC FIELD SUP'T FIELD FORE EP FITTERS FITTERS HB MARKE Record

## MM81619 0

Plant: Kemper County CHATTANOOGA BOILER & TANK CO. Southern Company Generation 2084-01-05 Rev: 0 PO: MPC10014852