

CUST NO.	ITEM NO.	NO. REQ'D	PART NO.	DESCRIPTION	DRAWING NO.
	1	1	V04	TANK ASSY 210 HL MODEL F BRIGHT BEER TANK 304 S/S	FP15840D
	1	1	H04	HEAD TOP ASSY ASME F&D .25" 304 S/S 6" ICR 1.5" SF	
	2	1	F38W349403	EXTENSION PIPE 4.0" SCH 80 304 S/S	DETAIL B
	3	1	O45W361707	FITTING (CUST FURN) DN100 304 S/S METRIC (NOTE 24)	DETAIL B
	4	1	F24W349403	EXTENSION PIPE 3" SCH 80 304 S/S	DETAIL B
	5	1	O42W361707	FITTING (CUST FURN) DN80 304 S/S METRIC (NOTE 24)	DETAIL B
	6	2	104W382414	LUG LIFTING ASSY SVW 304 S/S SIM. TO 9901259 EXC. ITEM 1 = .75" THK	9000480B
	7	1	C04	HEAD ASSY BOTTOM 90DEG CONICAL .25" 304 S/S W/ 14GA 304 S/S DIMPLE COIL 6" ICR 1.5" SF	FP15841D
	8	1	M16	MANWAY ASSY MC16 16" ID 304 S/S 6 LUG 4" COLLAR	9501074D
	9	1	(REF)	TUBE OUTLET 3" OD X .065" WALL 304 S/S 6" LG POLISHED ID (751P294433)	
	10	1	(REF)	NIPPLE 304/304L S/S 1.5"NPT X 6" LG SCH 40 TOE SA-312 (115W305103)	FP15841D
	11	1	(REF)	NIPPLE 304/304L S/S 1.5"NPT X 6" LG SCH 40 TOE SA-312 (115W305103)	FP15841D
	12	1	219W356145	CONE CLOSURE 5.0" ID X 3.5" OAL 14 GA 304 S/S 2B	
	13	1	S04	SHELL 304 S/S 10GA W/ 20GA INF HTS	FP15841D
	14	3	9824639	WELL ASSY THERM .75"NPT 316L S/S OAL 20 5/8"	
	15	2	(REF)	NIPPLE 304/304L S/S 1.5"NPT X 6" LG SCH 40 TOE SA-312 (9801781)	FP15841D
	16	2	(REF)	NIPPLE 304/304L S/S 1.5"NPT X 6" LG SCH 40 TOE SA-312 (9801781)	FP15841D
	17	4	417	LEG ASSY 8" SCH40 304 S/S 99.8125" LG	DETAIL A
	18	-	-	-	
	19	4	126W164563	LUG LEVELING .25" X 1" X 2" 304 S/S	DETAIL A
	20	4	420	PLATE BASE LEG 1" 304 S/S 11.25" DIAMETER (NOTE 23)	DETAIL A
	21	4	421	COLLAR LEG .25" X 4" X 8.75" ID 304 S/S (NOTE 23)	DETAIL A
	22	4		WASHER FLAT 1" (CUSTOMER SUPPLIED/INSTALLED)	DETAIL A
	23	4		TIE DOWN BOLT 1-BNC (CUSTOMER SUPPLIED/INSTALLED)	DETAIL A
	24	4		NUT HEAVY HEX 1-BNC (CUSTOMER SUPPLIED/INSTALLED)	DETAIL A
	25	1	425	RING BREAST 12GA 304 S/S	
	26	1	J04	JACKET OUTER 12GA 304 S/S	NOTE 29
	27	1	427	HEAD OUTER BOTTOM 12GA 304 S/S 90DEG CONE 2" ICR 1" SF	
	28	1	428	RING CLOSURE 12GA 304 S/S 31.25" OD FLANGED OD .25" ICR	DETAIL A
	29	1	9828988	VENT JACKET PLUG NYLON 6/6 PART #102000W BLACK	
	30	1	9902473	INSULATION 2" URETHANE GRVD 24" X 48"	NOTE 25
	31	1	9808680	INSULATION 2" THK CALCIUM MAGNESIUM-SILICATE THERMAL CERAMIC	NOTE 25
	32	1		PLATE NAME "MUELLER" ETCHED	
	33	1	9851152	PLATE DATA "ASME" VESSEL&HTS 18-8 S/S 5.5" X 4" X .048" THK ETCHED	
	34	1	9851480	PLATE DATA "MUELLER" 5.25" X 3.75" X .003" THK FOIL	
	35	1	9900380	ENVELOPE ASSY INSTRUCTION SINGLE WALL TANK	
	36	3	9901403	LABEL "IN" 1.5" X .5" X .005" THK MYLAR	
	37	3	9901404	LABEL "OUT" 1.5" X .5" X .005" THK MYLAR	
	38	6	9808631	LABEL ATTENTION "BACKUP" 3" X 2" X .005" THK MYLAR	
	39	6	9824549	LABEL ATTENTION "CUSTOMER" 3.5" X 1.75" X .005" THK MYLAR	
	40	1		PERMANENT STAMPED SERIAL NUMBER	
	41	1	441	JIG LEG HOLDING (RED HOOK)	
	42	1	9822763	GASKET MANWAY .375" SQ 16.25" ID WHITE NEOPRENE 50 DURO +OR- 5 FDA	
	43	1	143	PIPE STUB 3" SCH40 304 S/S BEVEL END	DETAIL C
	44	1	9802384	ADAPTER WELD IN .25" 304 S/S FOR PERLUCK PETCOCK 1.25" LG (CUSTOMER FURNISHED)	
	45	1	S51M305787	SLUG 1.50" DIA .25" THK 304 S/S	

NOTES, CONT'D:

- ASME DATA PLATE "RT" MARKING PER UG116(e) WHEN APPLICABLE.
- MATERIAL SPECIFICATIONS FOR ASME: S/S SHEET AND PLATE (SA-240), S/S ROD AND BAR (SA-479), S/S PIPE (SA-312), S/S TUBE (SA-213), S/S BOLTS (SA-193 GR. B8), S/S NUTS (SA-194 GR. 8), 316 S/S NUTS (SA-194 GR. 8M), S/S FORGINGS (SA-182), S/S COUPLINGS (UG-11) OR (SA-182). SEE PARTS LIST FOR C/S MATERIAL SPECIFICATIONS.
- ASME CODE JURISDICTION ENDS AT THE FIRST SEALING SURFACE OR WELD JOINT EXCLUDING MANWAY.
- ALL WELDING TO BE DONE BY ASME CERTIFIED WELDERS.
- SUITABLE PRESSURE RELIEF VALVE MUST BE INSTALLED BY CUSTOMER FOR VESSEL OPERATION.
- SUITABLE PRESSURE RELIEF VALVE MUST BE INSTALLED BY CUSTOMER FOR HEAT TRANSFER OPERATION.
- ENTIRE OUTER BOTTOM CONE, EXPOSED INNER CONE, RING CLOSURE, MANWAY, & LEG, FOOT, BRACE ASSY TO BE GLASS BEAD BLASTED.
- REMOVE HEAT TINT FROM VESSEL INTERIOR WITH SHEET POLISHER.
- STAMP TANK NUMBER AT HINGE POINT ON MANWAY.
- BASE PLATE (ITEM 20) & LEG COLLAR (ITEM 21) TO BE SHIPPED LOOSE.
- ITEMS 3 & 5 TO BE CUSTOMER SUPPLIED AND MAILED TO SALES FOR INSTALLATION BY PMCO.
- USE URETHANE INSULATION ON ALL THE SIDEWALL AND INSWOOL INSULATION ON BOTTOM CONE.
- BOTTOM HEAD AND LEGS TO BE INSTALLED ON BOTTOM HALF OF TANK PRIOR TO SHELL TO SHELL WELDING.
- NO ESCUTCHEON PLATES ARE TO BE USED ON THIS TANK.
- THIS TANK IS LOCATED IN A SHOW AREA. USE EXTRA CARE DURING PRODUCTION FOR TOP QUALITY RESULTS.
- OUTER JACKET SEAMS TO RUN VERTICAL.

CERTIFIED CORRECT AND RELEASED FOR FABRICATION

FABRICATION WILL BE IN ACCORDANCE WITH THIS DRAWING. ANY FURTHER CHANGES WILL BE REVIEWED FOR COST AND DELIVERY ADJUSTMENTS.

PAUL MUELLER COMPANY

- NOTES:**
- ALL MATERIALS OR COMPONENT PARTS CALLED OUT ON THIS DRAWING SHALL BE AS SPECIFIED "OR APPROVED EQUAL."
 - DIMENSIONS, UNLESS OTHERWISE INDICATED, ARE NOMINAL AND STANDARD SHOP TOLERANCES ARE TO BE EXPECTED. (ENPE 222) MEASUREMENTS FOR ANY FIELD ATTACHMENTS SHOULD BE VERIFIED ON SITE BY OTHERS BEFORE FABRICATION OF THE ATTACHMENTS.
 - CORROSION DISCLAIMER:** PAUL MUELLER COMPANY IS NOT RESPONSIBLE FOR CORROSION OR SUITABILITY FOR USE OF ANY MATERIAL IN ANY PARTICULAR APPLICATION! THE CORROSION RESISTANCE AND SUITABILITY FOR USE OF A MATERIAL IS DEPENDENT ON OPERATING ENVIRONMENT AND CONDITIONS, CLEANING PRACTICES, AND MANY OTHER FACTORS BEYOND THE CONTROL OF THE EQUIPMENT FABRICATOR. THE USER OF THE EQUIPMENT BEARS TOTAL RESPONSIBILITY FOR CORROSION OR SUITABILITY FOR USE OF ALL MATERIALS IN THEIR PARTICULAR APPLICATION.
 - ALL FLANGES WILL HAVE BOLT HOLES STRADDLE THE 0°-180° & 90°-270° CENTER LINES, UNLESS SPECIFIED OTHERWISE.
 - VESSEL TO BE VENTED FOR SHIPMENT.
 - ALL DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE.
 - ALL WELD SIZES ARE MINIMUM AFTER GRINDING.
 - CORROSION ALLOWANCE: 0 INCHES.
 - PRODUCT SPECIFIC GRAVITY: 1.0135-1.0560
 - VESSEL DESIGNED FOR WIND LOAD: 0 MPH.
 - VESSEL DESIGNED FOR SEISMIC ZONE: #2A
 - CUSTOMER TO PROVIDE SUFFICIENT PIPE SUPPORT & PIPING EXPANSION JOINT TO PREVENT EXTERNAL NOZZLE LOADS.
 - FOR DYE TEST REQUIREMENTS SEE PROCEDURE ENG 103

CERTIFIED BY PAUL MUELLER COMPANY VESSEL

DIV: MAWP 25 P.S.I. at 100 °F
 MAEWP 14 P.S.I. at 100 °F
 W MDMT -20 °F at 25 P.S.I.
 SERIAL NUMBER 384634-4
 YEAR BUILT 2008

HEAT TRANSFER SURFACE
 MAWP P.S.I. at °F
 MAEWP P.S.I. at °F
 MDMT °F at P.S.I.

NOTE #14: MUELLER

MATERIAL FINISHES

INTERIOR	2B/HRAP (NOTE 21)	EXTERIOR	2B/HRAP (NOTE 20)
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WELD FINISHES

INTERIOR	FINE GRIND #4
EXTERIOR	BUFF (BF) (NOTE 20)

SPECIFICATIONS VESSEL

CODE ASME

RADIOGRAPHY

Top Head To Shell	Top Head To Shell	Shell	Bottom Head To Shell	Bottom Head To Shell
NONE	NONE	NONE	NONE	NONE

HEAT TRANSFER

CODE NONE

RADIOGRAPHY

Top Head To Shell	Top Head To Shell	Shell	Bottom Head To Shell	Bottom Head To Shell

SIZE (GALLONS) - MODEL SERIAL NUMBER

21000 LITER	F	384634-4
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VESSEL INFORMATION

DESIGN PRESSURE	25	PSI	DESIGN TEMP.	100	°F
HYDRO TEST PRESSURE	33	PSI	DESIGN VACUUM	4" H2O	PSI
DESIGN PRESSURE	100	PSI	DESIGN TEMP.	100	°F
TEST PRESSURE	130	PSI	VOLUME	1.66	CU. FT.
MEDIUM	NONE / GLYCOL				

EST. EMPTY WEIGHT = 6,425 LBS

SCALE 3/8" = 1" (DO NOT SCALE THIS DRAWING)

DRAWN BY D. HUTCHISON DATE 3/28/2008
 REVIEWED BY [Signature] DATE 4/2/2008
 APPROVED BY [Signature] DATE 5/1/2008

SOLD TO REDHOOK BREWERY
 ADDRESS PORTSMOUTH, NH
 CUSTOMER ORDER NO. 40042

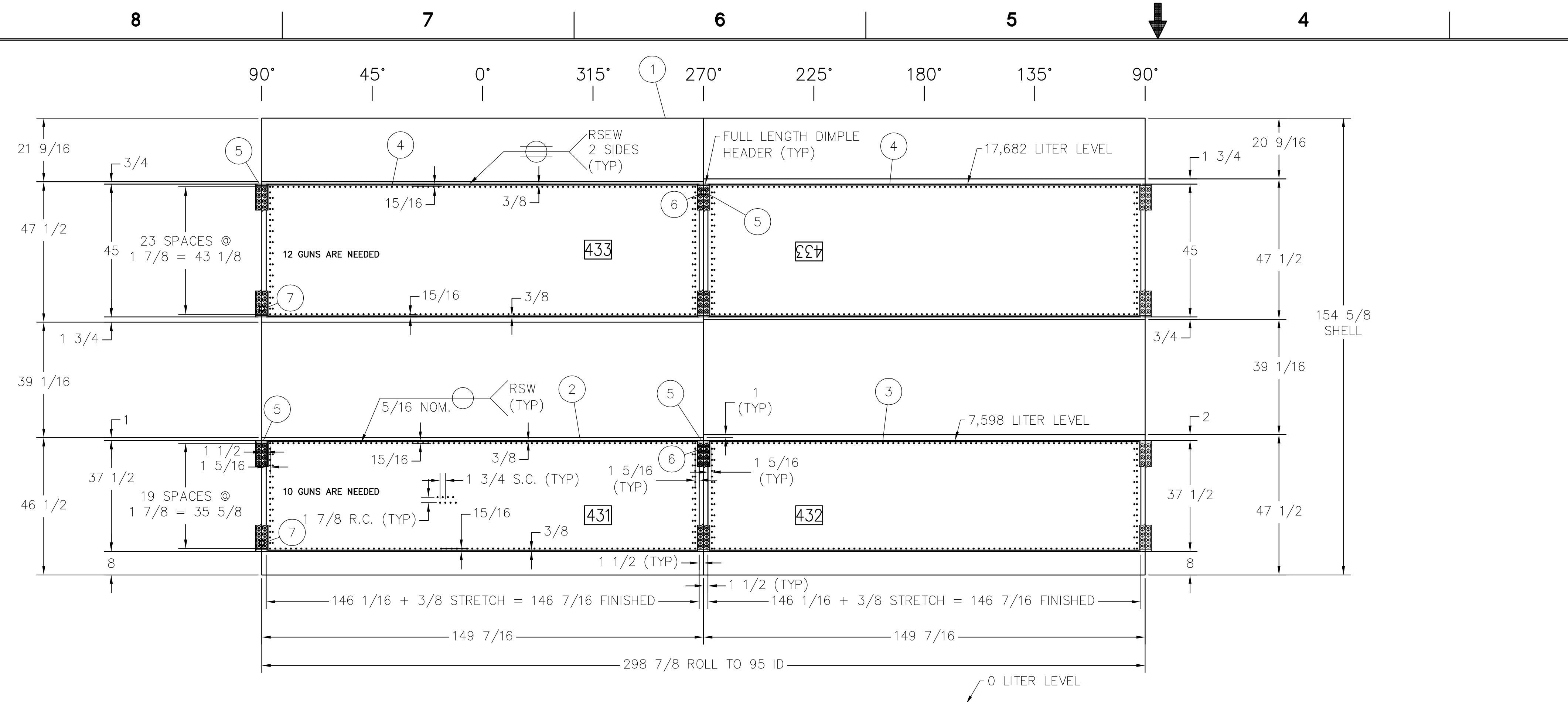
TITLE 210 HL MODEL F BRIGHT BEER TANK

QUANTITY ONE

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MUELLER
 P. O. BOX 828 / SPRINGFIELD, MISSOURI 65801-0828, U.S.A.

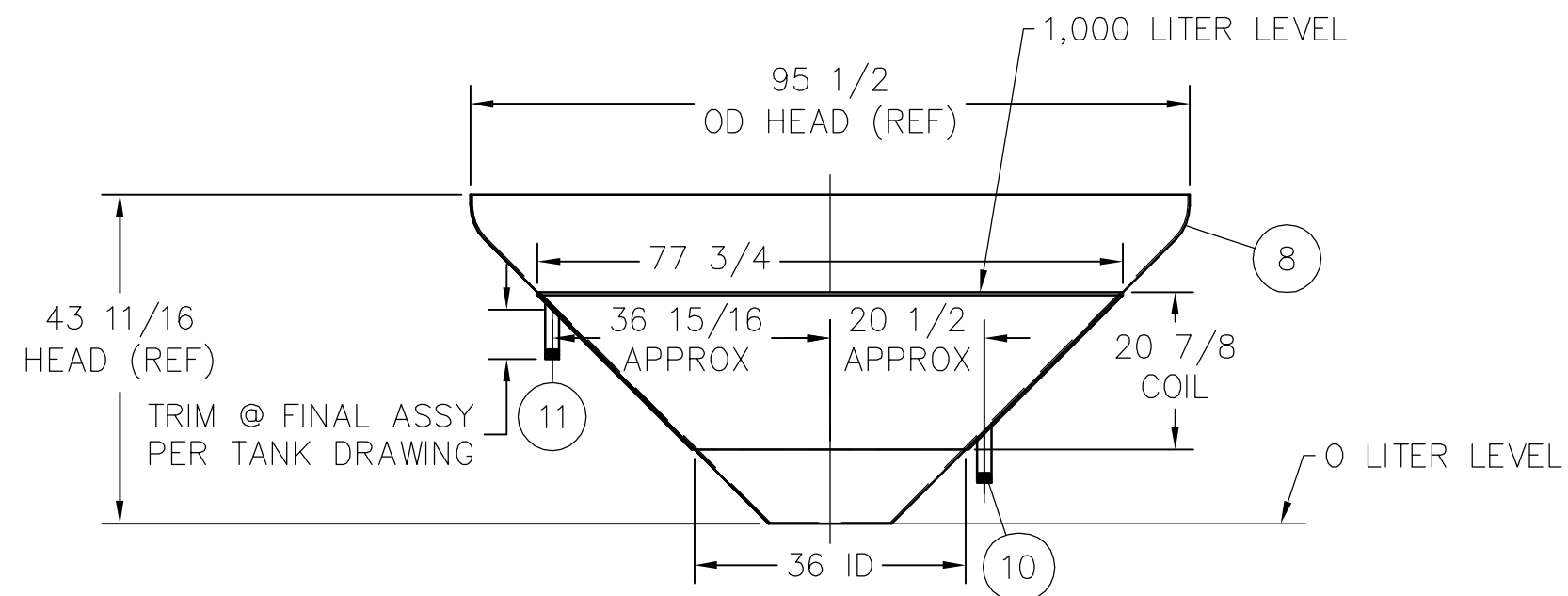
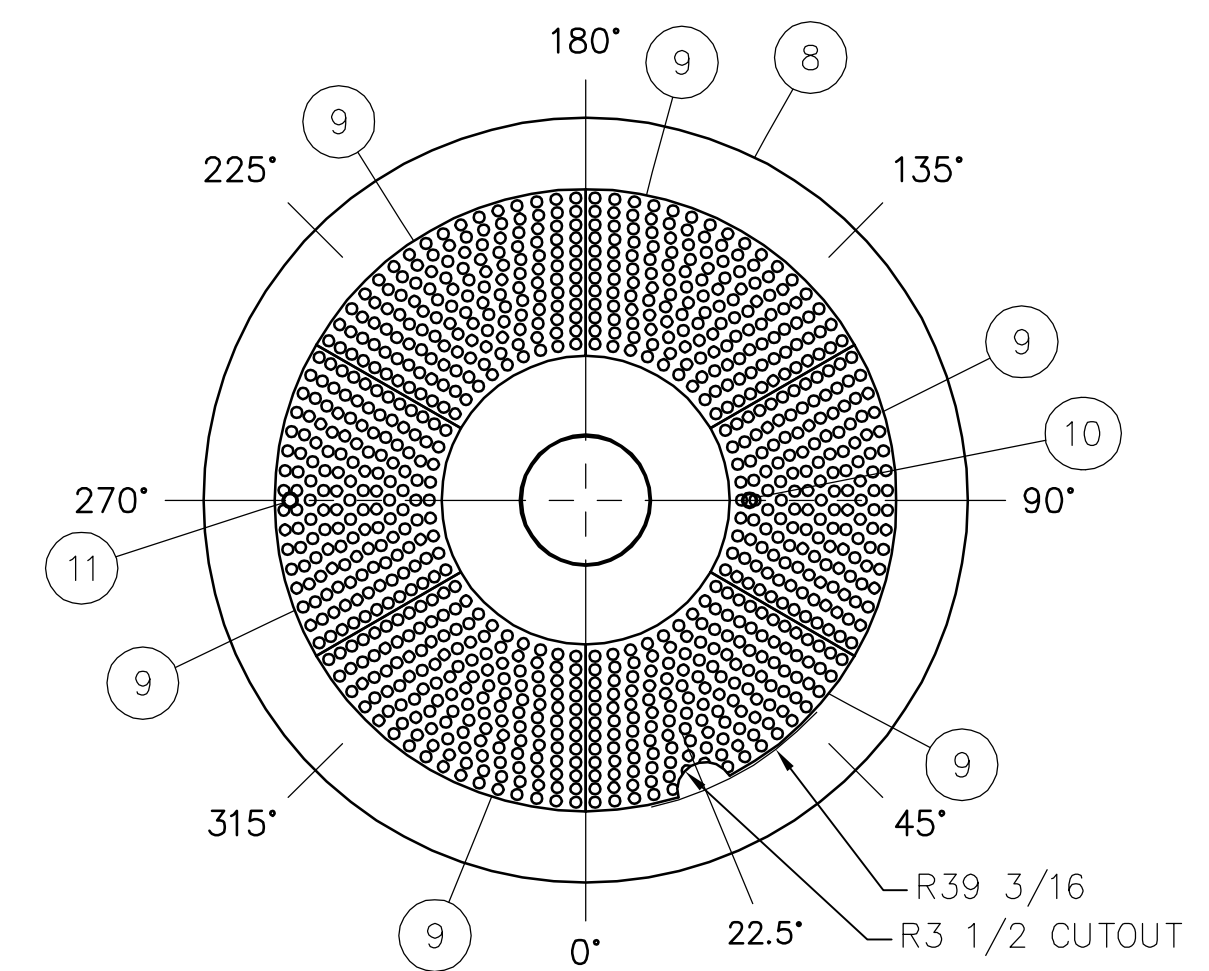
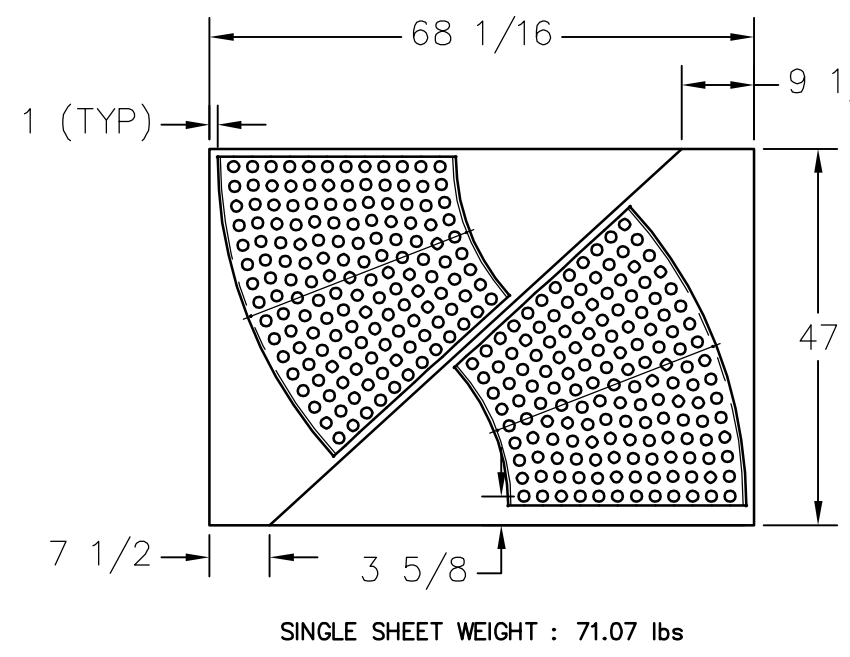
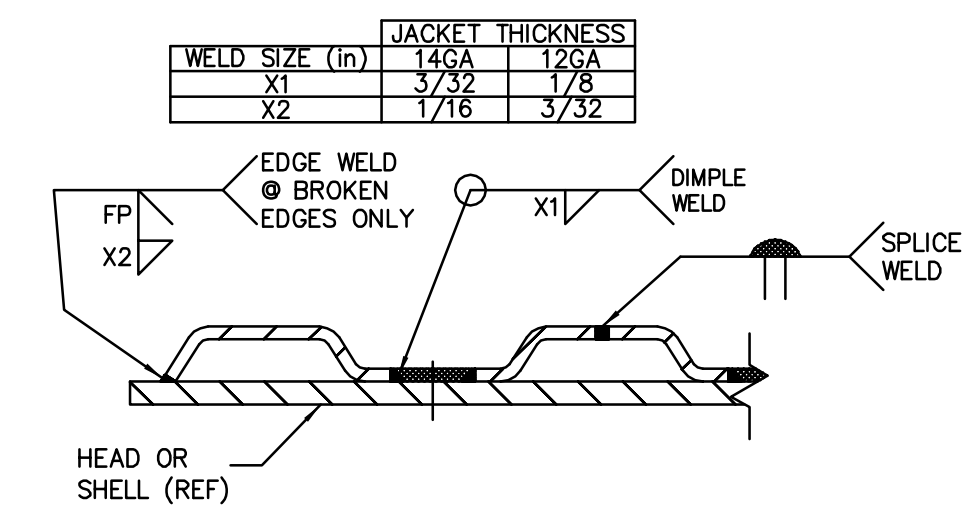
SALES ORDER & SERIAL NO. 384634-4
 DRAWING NO. FP15840



CUST NO.	ITEM NO.	NO. REQD	PART NO.	DESCRIPTION	DRAWING NO.
	1	1	S04	SHELL ASSY 10GA 304 S/S W/20GA INFLATED TP	FP15841D
	2	1	431	TEMP-PLATE ASSY INFLATED 20GA 304 S/S ON 10GA 304 S/S	
	3	1	432	TEMP-PLATE ASSY INFLATED 20GA 304 S/S ON 10GA 304 S/S	
	4	2	433	TEMP-PLATE ASSY INFLATED 20GA 304 S/S ON 10GA 304 S/S	
	5	4	9900872	HEADER DIMPLED DBL FLOW 48" LG 304 S/S 2B SA240	9900872B
	6	2	9801781	NIPPLE 304/304L S/S 1.5"NPT X 6"LG SCH 40 TOE SA-312 (OUTLET)	
	7	2	9801781	NIPPLE 304/304L S/S 1.5"NPT X 6"LG SCH 40 TOE SA-312 (INLET)	
	8	1	C04	CONE ASSY .25" 304 S/S W/ 14GA 304 DIMPLE COIL 90DEG 6"IKR 1.5"SF	FP15841D
	9	6	D04	DIMPLE COIL SECTION 14GA 304 S/S	
	10	1	115W305103	NIPPLE 304/304L S/S 1.5"NPT X 8"LG SCH 40 TOE SA-312 (INLET)	
	11	1	115W305103	NIPPLE 304/304L S/S 1.5"NPT X 8"LG SCH 40 TOE SA-312 (OUTLET)	

- NOTES:**
- ALL WELDING TO BE DONE BY ASME CERTIFIED WELDERS.
 - MATERIAL SPECIFICATIONS FOR ASME S/S SHEET PLATE (SA-240) S/S PIPE (SA-312)
 - SHELL & HEAD ARE RATED PER ASME CODE, TEMP-PLATE IS NOT.
 - SUITABLE PRESSURE RELIEF VALVE MUST BE INSTALLED BY CUSTOMER FOR HEAT TRANSFER OPERATION
 - ALL DIMENSIONS ARE IN INCHES UNLESS SPECIFIED OTHERWISE.
 - RESISTANCE SPOT WELDS ADJACENT TO HEADER(S) ARE TO BE IN STRAIGHT LINE AS SHOWN.
 - TEMP-PLATE SURFACE(S) TO BE POLISHED IN SHEET POLISHER TO REMOVE HEAT TINT.
 - INSTALL CONNECTIONS IN DIMPLED HEADER & DIMPLE PER DRAWING 9000729 C; DETAIL "B".
 - INSTALL DIMPLED HEADERS PER 9900872 B.
 - OK TO INFLATE THROUGH HEADERS & FITTINGS.
 - MDMT = -20°F @ 100 PSIG. MAEWP = 0 PSIG @ 100°F
 - LITER LEVELS ARE FOR CUSTOMER REFERENCE ONLY.
 - CONCENTRIC PATTERN ON CONE NOT TO EXCEED 2 1/2".
 - REFERENCE DRAWING NO. FP15840D FOR MAIN TANK ASSY.
 - CUSTOMER: REDHOOK BREWERY PORTSMOUTH, NH CUSTOMER ORDER NO.: 40042

SHELL FLAT LAYOUT



INCLUDED ANGLE OF CONE HEAD = 90°
 TEMP-PLATE THICKNESS = .076"
 FORMED SECTION INCLUDED ANGLE = 60°
 FLAT PATTERN INCLUDED ANGLE = .74°
 NUMBER OF TEMP-PLATE SECTIONS = 6
 AREA COVERED BY TEMP-PLATE = 36.87 SQ. FT.
 TEMP-PLATE INSIDE RADIUS = 25.62"
 TEMP-PLATE OUTSIDE RADIUS = 55.375"
 ROW SPACING ENTERED = 2.5"
 ROW SPACING CALCULATED = 2.3415"
 SPOT SPACING = 2.5"
 RADIUS OF FIRST ROW OF SPOTS = 27.62"
 RADIUS OF LAST ROW OF SPOTS = 53.375"
 STANDARD DIMPLE 1/4" DEEP WITH 1/2" DIAMETER HOLE
 FIT BY CENTERLINE

CERTIFIED CORRECT AND RELEASED FOR FABRICATION

FABRICATION WILL BE IN ACCORDANCE WITH THIS DRAWING. ANY FURTHER CHANGES WILL BE REVIEWED FOR COST AND DELIVERY ADJUSTMENTS.

PAUL MUELLER COMPANY

TEST PLATE NO.:	MS-332A (SHELL) A-718A (HEAD)		
TEMP-PLATE TYPE:	<input checked="" type="checkbox"/> INFL. <input checked="" type="checkbox"/> DIMPLED <input type="checkbox"/> DEFORMED		
ROW AND SPOT SPACINGS ON INFLATED TYPE CANNOT EXCEED 1/16" MORE THAN DIMENSIONS SHOWN ON THIS DRAWING FOR ASME EQUIPMENT. (REF. SECT. VII, DIV. 1, APX. 17.)			
MACHINE NO's: SPOT WELDS	SEAM WELDS		
PROTECTIVE PAINT:			
SURFACES TO BE PAINTED:			
TRIM EDGES:	<input type="checkbox"/> ENDS ONLY <input type="checkbox"/> ALL EDGES		
MATERIAL FINISHES	WELD FINISHES		
INTERIOR	2B/HRAP	MEDIUM GRIND #3	
EXTERIOR	2B/HRAP	BUFF (BF)	
<input type="checkbox"/> ASME 'U' STAMPED	<input type="checkbox"/> ASME DESIGNED (No Stamp)		
<input checked="" type="checkbox"/> NON ASME	<input type="checkbox"/> ASME MATERIAL & WELDING (No Stamp)		
SPECIFICATIONS	TOP HEAD	SHELL	BTM HEAD
DESIGN PRESSURE PSI		100	100
DESIGN TEMP. °F		100	100
MAX. HYDROSTATIC INFLATION PSIG		500	
HYDROSTATIC TEST PSIG		130	130
MAX. PNEUMATIC INFLATION PSIG			
PNEUMATIC TEST PSIG			
PILLOW DEPTH INCHES		.093	.25
HEATING MEDIUM			
COOLING MEDIUM		GLYCOL	GLYCOL
DEHYDRATION (per MFTPI00)			
TEMP-PLATE CONTACT AREA (S.F.)		164.74	36.74
TEMP-PLATE VOLUME CU.FT.		1.01	.65
QUANTITY:		ONE	

APPROVED BY: *[Signature]* 5/2/2008

ALL MATERIALS OR COMPONENT PARTS CALLED OUT ON THIS DRAWING SHALL BE AS SPECIFIED OR APPROVED EQUAL			
SYM.	CHANGE	BY	DATE
	REVISIONS		
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TITLE SHELL & BOTTOM HEAD HEAT TRANSFER ASSY		DRAWING NO. FP15841D	

SEPIA FROM DWG. NO.

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS

Size Category _____

(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by **Paul Mueller Company, 1600 W. Phelps, Springfield, Missouri, 65802, USA**
(Name and address of manufacturer)

2. Manufactured for **REDHOOK BREWERY, 35 CORPORATE DRIVE, PORTSMOUTH, New Hampshire, 03801, USA**
(Name and address of purchaser)

3. Location of Installation **REDHOOK BREWERY, 35 CORPORATE DRIVE, PORTSMOUTH, New Hampshire, 03801, USA**
(Name and address)

4. Type **Vertical** **384634-4** **N/A** **FP15840 rev. A** **45318** **2008**
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing No.) (National Board number) (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 **2007** to **N/A**
(Code Case numbers) (Special Service per UG-120(d)) (year) [Addenda (Date)]

6. Shell: **SA-240 304** **.135"** **0 in** **7' 11.0" (ID)** **12' 10.625"**
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) [Length (overall)]

7. Seams: **Welded / Butt** **None** **70%** **N/A** **N/A** **Welded / Butt** **None** **70%** **4**
[Long. (welded, dbl., singl., lap, butt)] R.T.(Spot or Full) Eff.(%) (H.T. temp) Time (hr) [Girth. (welded, dbl., singl., lap, butt)] [R.T. (spot or full)] Eff.(%) No. of Courses

8. Heads: (a) Material **SA-240 304** (b) Material **SA-240 304**
(Spec. no., grade) (Spec. no., grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Top	.186"	0	95.0"	6"	N/A	N/A	N/A	N/A	Both
(b)	Bottom	.207"	0	N/A	6"	N/A	90	N/A	N/A	Both

If removable, bolts used (describe other fastenings) **N/A**
(Material, spec. number, grade, size, number)

9. MAWP **25 psi** **.14 psi** at max. temp. **100 °F** **100 °F**
(Internal) (External) (Internal) (External)

Min. design metal temp. **-20 °F** at **25 psi** Hydro, pneu., or comb. test pressure **HYDRO at 33 PSI**

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	Number	Diameter or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached	Location
Inspection	1	16"	Manway	SA-240 304	.25"		UW16.1(c)	Bottom Head
Unknown	1	4"	Pipe Ext.	SA-312 304	sch.80		UW16.1(k)	
Unknown	1	3"	Pipe Ext.	SA-312 304	sch.80		UW16.1(k)	
Unknown	1	3"	Pipe Stub	SA-312 304	sch.40		UW16.1(c)	
Unknown	1	3"	Tube Ext.	SA-312 304	.065"		UW16.1(k)	

Additional Nozzles - See Attached U-4...

11. Supports: Skirt **No** Lugs **N/A** Legs **Four** Other **N/A** Attached **Welded to bottom head.**
(Yes or no) (Number) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors, have been furnished for the following items of the report:
N/A
(Name of part, item number, Manufacturer's name and identifying stamp)

Vessel is a 210 HL Bright Beer Tank with non-ASME HTS, hydro tested in the vertical position. Charpy Impact Test exempt per UHA-51(d,e,f). Pressure relief to be located per UG-125.

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. **5594** expires **September 21,**

Date **08/19/2008** Co. name **Paul Mueller Company** Signed **[Signature]**
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by **Paul Mueller Company** at **1600 W. Phelps, Springfield, Missouri, 65802, USA**, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province **OK, KS, MO** and employed by **HSB CT, of Hartford, CT** have inspected the component described in this Manufacturer's Data Report on

August 21, 2008 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date **08/21/2008** Signed **[Signature]** Commissions **7376A, OK652, KS356, MO0132**
(Authorized Inspector) (National Board (incl. endorsements), State, Province and number)

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Paul Mueller Company, 1600 W. Phelps, Springfield, Missouri, 65802, USA
(Name and address of Manufacturer)

2. Manufactured for REDHOOK BREWERY, 35 CORPORATE DRIVE, PORTSMOUTH, New Hampshire, 03801, USA
(Name and address of Purchaser)

3. Location of installation REDHOOK BREWERY, 35 CORPORATE DRIVE, PORTSMOUTH, New Hampshire, 03801, USA
(Name and address)

4. Type Vertical N/A 384634-4
(Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Manufacturer's serial number)

N/A FP15840 rev. A 45318 2008
(CRN) (Drawing number) (National Board number) (Year built)

Data Report
Item Number

Remarks

Additional nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Mat'l.	Nom. Thk.	Reinforcement Mat'l.	How Attached	Location
Unknown	3	.75"	T-well	SA-479 316	1.25"		UW16.1(k)	

Certificate of Authorization: Type "U" No. 5594 Expires September 21, 2010

Date 08/19/2008 Name Paul Mueller Company Signed *Mike Mitchell*
(Manufacturer) (Representative)

Date 08/21/2008 Signed *B. J. Poore* Commissions 7376A, OK652, KS356, MO0132
(Authorized Inspector) (National Board Authorized Inspector Commission number)