

# RMF DESIGN & INSPECTION, INC.

≡VSSPEC≡ API 510

## Pressure Vessel Inspection/Rating Program

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INSPECTED FOR: **AMOCO PRODUCTION COMPANY**

VESSEL TAG: V6-1101-2 *EAS*  
MFG. BY: J. B. BEARID CO.  
VESSEL TYPE: #8 PROPANE STO. TANK  
YEAR BUILT: 1952 SIZE: 120" OD X 67'-2" S/S

### SUMMARY

Visual inspection revealed good overall condition. UT inspection revealed no critical indications. No documentation was found.

*OK*  
*9-1-94*  
*JD*  
*Rec'd [Signature]*



## NAMEPLATE DOCUMENTATION

### Vessel Nameplate/Stamping Information

Record all data EXACTLY as shown on the nameplate or stamping. Indicate if not legible or it appears to have been altered from original. Obtain a rubbing and attach to this form

Fabricator/Manufacturer: BEAIRD CO., SHREVEPORT, LA. *MAN SERIAL # W-9631-2*

MAWP (psig) 225 at 150 °F Minimum Design Metal Temperature °F \_\_\_\_\_

Manufacturers SN: NOT LEGIBLE NB SN: \_\_\_\_\_ Stamp \* Year Built 1952

Nameplate Stamping (RT-1,2,3,4; HT; PWHT; W; Other) \* = API-ASME

Drawing Number \_\_\_\_\_ Hydrotest Pressure (psi): \_\_\_\_\_

Job Number \_\_\_\_\_ Work Order Number \_\_\_\_\_

Additional Information: C.A. 0" INFO TAKEN FROM DWG., NAMEPLATE PAINTED OVER

### Supplemental Nameplate/Stamping Information

Record all data EXACTLY as shown on the nameplate or stamping. Indicate if not legible or it appears to have been altered from original. Obtain a rubbing and attach to this form.

Name of repair organization: \_\_\_\_\_

☐ Repair ☐ Alteration ☐ Replacement ☐ Rerating

MAWP (psig) \_\_\_\_\_ at \_\_\_\_\_ °F Date of Repair \_\_\_\_\_

Shell Material Specification: \_\_\_\_\_ Head Material Specification \_\_\_\_\_

Additional Information: \_\_\_\_\_

### Pressure Relief Equipment

List all pressure relief equipment on the vessel such as pressure relief valves, rupture disks, etc. List all nameplate information EXACTLY as shown. Indicate where pressure relief device(s) are located, (on vessel, on gas outlet piping, on inlet piping, etc.).

Manufacturer:	<u>Consolidate</u>		
Design/Type/Model No:	<u>1610QC-1</u>		
Serial No.:	<u>IS67762</u>		
Set/Burst Press (psig):	<u>225#</u>		
Coincident Disk Temp °F			
Certified Capacity (lbs/hr sat. steam; gal/min water; cu.ft. of air/min.)			
Orifice NPS Size:	<u>11.05</u>		
Year Built:			
Location of Device:	<u>*</u>		
Additional Information:	<u>* = SOUTH END TOP 6" NOZZ SIZE 60R</u>		



# NAMEPLATE DOCUMENTATION

## Vessel Nameplate/Stamping Information

Record all data EXACTLY as shown on the nameplate or stamping. Indicate if not legible or it appears to have been altered from original. Obtain a rubbing and attach to this form

Fabricator/Manufacturer: THE J.B. BEAIRD CO., SHREVEPORT, LA.

MAWP (psig) 225 at 100 °F Minimum Design Metal Temperature °F \_\_\_\_\_

Manufacturers SN: 3691-3 NB SN: \_\_\_\_\_ Stamp \_\_\_\_\_ Year Built 1952

Nameplate Stamping (RT-1,2,3,4; HT; PWHT; W; Other) API-ASME

Drawing Number \_\_\_\_\_ Hydrotest Pressure (psi): \_\_\_\_\_

Job Number \_\_\_\_\_ Work Order Number \_\_\_\_\_

Additional Information: \_\_\_\_\_

## Supplemental Nameplate/Stamping Information

Record all data EXACTLY as shown on the nameplate or stamping. Indicate if not legible or it appears to have been altered from original. Obtain a rubbing and attach to this form.

Name of repair organization: \_\_\_\_\_

☐ Repair ☐ Alteration ☐ Replacement ☐ Rerating

MAWP (psig) \_\_\_\_\_ at \_\_\_\_\_ °F Date of Repair \_\_\_\_\_

Shell Material Specification: \_\_\_\_\_ Head Material Specification \_\_\_\_\_

Additional Information: \_\_\_\_\_

## Pressure Relief Equipment

List all pressure relief equipment on the vessel such as pressure relief valves, rupture disks, etc. List all nameplate information EXACTLY as shown. Indicate where pressure relief device(s) are located, (on vessel, on gas outlet piping, on inlet piping, etc.).

Manufacturer: Consolidate

Design/Type/Model No: 1610QC-1

Serial No.: TS67761

Set/Burst Press (psig): 225#

Coincident Disk Temp °F \_\_\_\_\_

Certified Capacity \_\_\_\_\_

(lbs/hr sat. steam; gal/min water; cu.ft. of air/min.)

Orifice NPS Size: 11.05

Year Built: \_\_\_\_\_

Location of Device: \*

Additional Information: \* = SOUTH END TOP 6" NOZZ. SIZE:6Q8

LAST DATE SERVICED: 10-13-93



**Vessel Location**Company AMOCO PRODUCTION Date of Inspection: 6-23-94Business Unit: \_\_\_\_\_ Operations Center: Empire A B OField Name: \_\_\_\_\_ Facility/Lease Name: Empire Gas Plant**Vessel Identification**Vessel Number V6-1101-2 Name #8 Propane Storage TankVessel Status ☒ Code ☐ Unknown ☐ Code-Invalidated ☐ Non-CodeASME VIII Division: ☐ Div 1 ☐ Div 2 ☒ Other API-ASME**Vessel Description and Service Conditions**Description of Service: ☒ General Sweet ☐ General Sour ☐ MEA ☐ DEA  
☐ Sulfinol ☐ Caustic ☐ Other \_\_\_\_\_Material of Construction: ☒ Carbon Steel ☐ Stainless Steel ☐ Lined Carbon Steel

Shell Material Specification: \_\_\_\_\_ Head Material Specification \_\_\_\_\_

**Type of Vessel:**

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Air Dryers                          | <input type="checkbox"/> Amine Contactor  | <input type="checkbox"/> Amine Exchanger |
| <input type="checkbox"/> Amine Filter                        | <input type="checkbox"/> Amine Flash Tank | <input type="checkbox"/> Amine Reboiler  |
| <input type="checkbox"/> Amine Still                         | <input type="checkbox"/> Exchanger        | <input type="checkbox"/> Gas Cooler      |
| <input type="checkbox"/> Gas Scrubber                        | <input type="checkbox"/> Gas Separator    | <input type="checkbox"/> Heater Treater  |
| <input type="checkbox"/> Liquid Separator                    | <input type="checkbox"/> Mole Sieve Tower | <input type="checkbox"/> Stabilizer      |
| <input type="checkbox"/> Stabilizer Feed Drum                | <input type="checkbox"/> Stabilizer Tower | <input type="checkbox"/> Steam Vessel    |
| <input checked="" type="checkbox"/> Other <u>Lpg Storage</u> |   |  |

Nominal Vessel (in.): ☒ ID ☐ OD 120" Length (in.) S/S: 67'-2"Nominal Vessel Wall Thickness (in.): \_\_\_\_\_ Shell: 0.38 Head: 0.50Operating Pressure Range (psig): 200 Operating Temperature Range (°F) 80Percent H<sub>2</sub>S in gas: \_\_\_\_\_ Percent CO<sub>2</sub> in gas: \_\_\_\_\_ Free Water ☐ Yes ☐ No**Previous Service History: (List Service Duration)**

_____ Air Dryers	_____ Amine Contactor	_____ Amine Exchanger
_____ Amine Filter	_____ Amine Flash Tank	_____ Amine Reboiler
_____ Amine Still	_____ Exchanger	_____ Gas Cooler
_____ Gas Scrubber	_____ Gas Separator	_____ Heater Treater
_____ Liquid Separator	_____ Mole Sieve Tower	_____ Stabilizer
_____ Stab. Feed Drum	_____ Stabilizer Tower	_____ Steam Vessel
<u>1952</u> Other <u>LPG STORAGE</u>		



Form No. 1 for Manufacturer's Report on an Unfired Pressure Vessel as Required by the Provisions of the API-ASME Code

001101

1. Manufactured by THE J. B. BEAIRD CO., INC. Shreveport, Louisiana  
Beaird's Shop Job Number W-3691 Sales Order 30948

2. Manufactured for Hudson Engineering Corp., Houston, Texas Order No. 3260-3

3. Position in service Horizontal Serial Number W-3691-3

4. Have the Mill Test Reports been checked on all the plates entering this unfired Pressure Vessel? Yes  
Do the chemical and physical properties of all plates meet the requirements of the Code? Yes

5. Shell or Drums: Thickness .98 Inches. No. 1 Outside Diameter 121.96 Inches.  
Overall length 77' 5"

6. Stamps on shell plate A-212-B Fbr., 70,000 Min. T.S. Bolts A-193-B7

7. Seams: Longitudinal Double Welded Butt Joint Girth Double Welded Butt Joint

8. Joints Radiographed \_\_\_\_\_ Stress Relieved \_\_\_\_\_ Joint Efficiency 80%

9. Radiographed Inspection

	All or %	Thickness
a. Longitudinal Joints	_____	_____
b. Girth Joints	_____	_____

Stress Relieving	Heads	Ring Nos.	Controlling Thickness	Temperature	Time Temperature Held in Minutes.
a. If part of Vessel only	_____	_____	_____	_____	_____
b. If entire Vessel	_____	_____	_____	_____	_____

10. Outer Shell \_\_\_\_\_ Inch. Style of Seams: Longitudinal  
Girth \_\_\_\_\_ Length of section \_\_\_\_\_

11. Heads: Two .50" x 121.96" OD API-ASME Code Hemispherical

12. Nozzles: (1) 1 1/2", (2) 3/4", (2) 1", (1) 1-1/2" 6000# Cplgs: (7) 2" (2) 6" 300# Weld Neck Flgs. w/ Pipe Neck

13. ~~Headstays~~: (1) 4" 300# Long Weld Neck

14. ~~Signatures~~: \_\_\_\_\_

15. Manways: (1) 16" 300# Long Weld Neck

16. Method of supporting vessel (2) Fabricated Steel Saddles

17. Allowable working pressure at atmospheric temperature 226 PSI.  
a. Hydrostatic test pressure 339 PSI.  
b. Hydrostatic test pressure when hammer tested 282 PSI.  
c. Proof test pressure if applied \_\_\_\_\_ PSI.  
d. Location of yield if yielding occurred \_\_\_\_\_  
e. Hydrostatic test stress in longitudinal joint 20,925 PSI.  
f. Allowable operating stress 13,950 PSI.

18. Constructed for a pressure of 225 PSI. with a specified operating temperature of 150 °F. and a corrosion allowance of None

19. Remarks This report covers one 120" ID x 67' 3" Seam to Seam 43,522 Gallon Propane Storage Tank, constructed in accordance with The J. B. Beaird Company, Inc. Drawing Order No. W-3691, Sheet 1 & 2 of 2.

WE CERTIFY the above data to be correct and that all details of material, construction, and workmanship on this unfired pressure vessel conform to the API-ASME CODE FOR UNFIRED PRESSURE VESSELS for Petroleum Liquids and Gases

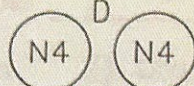
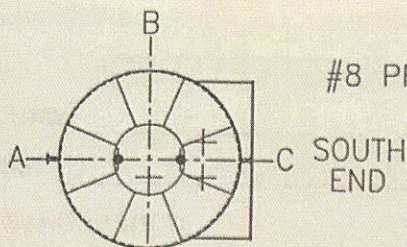
Date 7-3-52 Signed THE J. B. BEAIRD CO., INC. By M.B. Horton  
Date 7-3-52 Checked by G.W. Hesseman For The Fidelity & Casualty Company of New York



# AMOCO

## #8 PROPANE STORAGE TANK

W



SEC 1



SEC 2



SEC 3



WEST  
VIEW

SEC 4



SEC 5

SEC 7

SEC 6

SEC 1: A 0.554  
B 0.547  
C 0.532  
D 0.534

SEC 2: A 1.002  
B 1.000  
C 1.003  
D 1.001

SEC 3: A 1.002  
B 1.003  
C 1.006  
D 1.004

SEC 4: A 1.003  
B 1.012  
C 1.010  
D 1.006

SEC 5: A 1.005  
B 1.019  
C 1.006  
D 1.012

SEC 6: A 1.006  
B 1.006  
C 1.003  
D 1.001

SEC 7: A 0.554  
B 0.523  
C 0.522  
D 0.523

N 1: A 0.238  
2" B 0.236  
300# C 0.241  
D 0.240

N 1A: A 0.238  
2" B 0.236  
300# C 0.246  
D 0.245

N 2: A 0.231  
2" B 0.229  
300# C 0.231  
D 0.230

N 3: A 0.228  
2" B 0.224  
300# C 0.223  
D 0.225

N 5: A 0.410  
6" B 0.419  
300# C 0.421  
D 0.428

N 6: A 0.449  
6" B 0.448  
300# C 0.442  
D 0.432

N 7: A 0.940  
4" B 0.940  
300# C 0.938  
D 0.938

N 8: A 0.245  
2" B 0.251  
300# C 0.246  
D 0.244

M 1: A 0.390  
16" B 0.393  
300# C 0.396  
D 0.390

A DOB C NOZZLE UT POIN  
LOOKING INTO E  
NOZZLE, "A" PO  
SOUTH