FORM A-2 MANUFACTURER'S PARTIAL DATA REPORT A PART OF A pressure Vessel Fabricated by One Manufacturer for Another Manufacturer

Page \_\_\_\_ of \_\_

Flat Diameter (Convex or Concave)

\_\_\_\_\_ If bolted, describe or sketch.

| . Manufactur   | ed and certified by        |                     |   |                   |                |                               |                                     |            |  |
|----------------|----------------------------|---------------------|---|-------------------|----------------|-------------------------------|-------------------------------------|------------|--|
|                | · _                        |                     | (N  | lame and address  | of manufactu   | rer)                          |                                     |            |  |
| . Manufactur   | ed for                     |                     |   |                   |                |                               |                                     |            |  |
|                |                            |                     |   | (Name and addres  | ss of purchase | er)                           |                                     |            |  |
| . Location of  | installation               |                     |   |                   |                |                               |                                     |            |  |
|                |                            |                     |   | (Name and         | address)       |                               |                                     |            |  |
| . Туре         |                            |                     |   |                   |                |                               |                                     |            |  |
|                | Horiz. or vert. tank       | Mf                  | r's. Serial No.   | CRN               | Drawii         | ng No.                        | Nat'l Board No.                     | Year built |  |
| construction,  | and workmanship confor     | rm to ASME Code, Se | ction VIII, Division 2  | Class             |                |                               | Code case No.                       |            |  |
| . Constructed  |                            |                     |   |                   |                |                               |                                     |            |  |
| ama 7 ta 12 in | Drawing No                 |                     | Drawing Prepared by<br>Il vessels, jackets of jacketed vessels, or shells |                   |                | Description of part inspected |                                     |            |  |
| Shell          | n. to be completed lo      | r single wall vesse | ers, jackets of jaci  | kelea vesseis, or | shells of he   | at exchange                   | ers                                 |            |  |
|                | Aaterial (Spec. No., Grade | e) Nom. tł          | nk  | Corr. allow.      | diame          | ter                           | Length (                            | overall)   |  |
| -              |                            |                     |   |                   |                |                               |                                     |            |  |
| Seams          |                            | <u> </u>            | Heat  | treatment         |                | No                            | ndestructive Examina                | ation      |  |
| Seams          | Longitudina                |                     | nout  |                   |                |                               |                                     |            |  |
| Seams<br>Girth | Longitudina                |                     |   | tive Examination  |                |                               | No. of Courses                      |            |  |
| Girth          | Heat treatm                |                     |   |                   | ) Matl.        |                               | No. of Courses                      |            |  |
| Girth          | Heat treatm                | ent                 |   |                   | ) Matl         |                               | No. of Courses<br>Spec., No., Grade |            |  |

Elliptical Ratio

If bar, give dimensions —

(internal)

Conical Apex Angle

Radius

\_\_\_\_\_ Min. design metal temp. \_\_\_\_\_ at \_\_\_\_\_

Matl. Spec. No. Grade Size Number

At test temperature of

Radius

at max. temp. 🚊

Allowance

Describe as ogee and weld, bar. etc

(external)

Radius

| Hydro., pneu., or comb test pressure               |  |
|--|--|
|  |  |
| Items 13 and 14 to be completed for tube sections. |  |

(internal)

Thickness

10. If removable, bolts used (describe other fastenings): \_

Bottom, End)

11. Jacket closure -

Impact test

MAWP

(a) (b)

12.

|     | Tubesheets              | be bonn  | sieteu ioi tube s           | conons.                |               |                   |                  |                 |         |                         |                 |  |  |
|-----|-------------------------|----------|-----------------------------|------------------------|---------------|-------------------|------------------|-----------------|---------|-------------------------|-----------------|--|--|
|     |                         | Statio   | onary matl. (Spe<br>Grade)  | c. No.,                | Diam. (Subjec | t to pressu       | ire)             | Nom. thk.       |         | Corr. Allow             | . Att           | ach. (wld., bolted)                    |  |
|     |                         | Floa     | ting matl. (Spec.<br>Grade) | . No.,                 | (Diar         | n. )              |                  | Nom. thk.       |         | Corr. Allow             | v. A            | ttach. (wld., bolted)                  |  |
| 14. | Tubes                   | Mot      | . (Spec. No Gra             |                        | 0.D.          |                   |                  | Nom. thk.       |         | Number                  |                 | pe (straight or "U")                   |  |
|     | - 15 to 10 in al        |          |                             |                        |               |                   |                  |                 |         | number                  | туре            | (straight or 0)                        |  |
|     | Shell                   |          | •                           |                        | •             | seis, or cn       | annels of heat e | cnangers        |         |                         |                 |  |  |
|     | N                       | laterial | Spec. No., Grad             | e)                     | Nom. thk.     |                   | Corr. allow.     |                 | diamete | r                       | Length          | (overall)                              |  |
| 16. | Seams                   |          |                             |                        |               |                   |                  |                 |         |                         |                 |  |  |
|     | ·                       |          | Longitudina                 | I                      |               | Heat              | treatment        |                 |         | Nondestr                | ructive Examina | tion                                   |  |
|     | Girth                   |          | Heat treatm                 | ent                    |               | Nondestru         | ctive Examinatio | n               |         | No                      | . of Courses    |  |  |
| 17. | Heads: (a) M            | latl.    |                             |                        |               | (b)               | Matl.            |                 |         |                         |                 |  |  |
|     |                         |          |                             | Spec., No.,            | Grade         |                   |                  |                 | 5       | Spec., No., Gra         | ide             |  |  |
|     | Location (<br>Bottom, E |          | Minimum<br>Thickness        | Corrosion<br>Allowance |               | Knuckle<br>Radius | Elliptical Ratio | Conical Apex    | Angle   | Hemispherical<br>Radius |                 | Side to Pressure<br>(Convex or Concave |  |
| (a) |                         |          |                             |                        |               |                   | i .              |                 |         |                         |                 |  |  |
| (b) |                         |          |                             |                        |               |                   |                  |                 |         |                         |                 |  |  |
| 18. | lf removable            | e, bolts | used (describ               | be other fas           | tenings):     |                   | Ň                | latl. Spec. No. | Grade   | Size Number             |                 |  |  |
|     |                         |          |                             |                        |               |                   |                  |                 |         |                         |                 |  |  |
| 19. |                         |          |                             |                        | •             |                   |                  | npact           |         |                         |                 |  |  |
|     | at test temp.           | . of     |                             |                        | Mir           | n. design         | metal temp       | at              |         |                         |                 |  |  |

Pneu., hydro., or comb. pressure test

# FORM A-2

#### Manufactured by

Manufacturer's Serial No.\_\_\_\_\_ CRN \_\_\_\_

\_\_\_\_\_ National Board No.\_\_\_\_\_

Items below to be completed for all vessels where applicable

## 20. Nozzles inspection and pressure relief device openings

| Purpose                     |     |               |      |          |           |                       |              |          |
|-----------------------------|-----|---------------|------|----------|-----------|-----------------------|--------------|----------|
| (Inlet, Outlet, Drain, etc) | No. | Diam. or Size | Type | Material | Nom. Thk. | Reinforcement Materia | How Attached | Location |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |
|                             |     |               |      |          |           |                       |              |          |

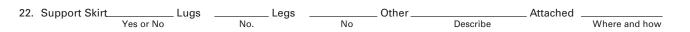
## 21. Body Flanges

## Body Flanges on Shells

|     |      |    |    |            |             |          |              |          |            |                  | Bolting                 |                 |
|-----|------|----|----|------------|-------------|----------|--------------|----------|------------|------------------|-------------------------|-----------------|
| No. | Туре | ID | OD | Flange Thk | Min Hub Thk | Material | How Attached | Location | Num & Size | Bolting Material | Washer<br>(OD, ID, thk) | Washer Material |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |

#### Body Flanges on Heads

|     |      |    |    |            |             |          |              |          |            |                  | Bolting                 |                 |
|-----|------|----|----|------------|-------------|----------|--------------|----------|------------|------------------|-------------------------|-----------------|
| No. | Туре | ID | OD | Flange Thk | Min Hub Thk | Material | How Attached | Location | Num & Size | Bolting Material | Washer<br>(OD, ID, thk) | Washer Material |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |
|     |      |    |    |            |             |          |              |          |            |                  |                         |                 |



Remarks:

FORM A-2

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| Manufactured by   |   |  |  |
|---|---|--|--|
| Manufacturer's Serial No  | CRN   | National Board   | No   |
|   |   |  |  |
|   | CERTIFICATION   |  |  |
| User's Design Specifcation on file at   |   |  |  |
| Manufacturer's Design Report on file at   |   |  |  |
| User's Design Specification certified by  |   |  |  |
| Manufacturer's Design Report certified by_  |   | PE State   | Reg. No  |
| We certify that the statements in this repo<br>conform to the ASME Code for Pressure V<br>"U2" or "PRT"Certificate of Authorization I   | essels, Section VIII, Division 2.   | of design, material, constr  | · ·  |
| DateCo. r   |   |  |  |
|   | Manufacturer  |  | Representative   |
| I, the undersigned, holding a valid comm  | <b>CERTIFICATE OF SI</b><br>ission issued by the National Bo  | ard of Boiler and Pressure   | Vessel Inspectors and employed by,   |
| have inspected the part of a pressure vess<br>and state that, to the best of my knowledg<br>Division 2. By signing this certificate neither<br>this Manufacturer's' Data Report. Furthermo<br>damage or a loss of any kind arising from | e and belief, the Manufacturer ha<br>the Inspector nor his employer mak<br>re, neither the Inspector nor his em | er's Data Report on<br>as constructed this part in ac<br>es any warranty, expressed of<br>aployer shall be liable in any | ,<br>ccordance with ASME Code, Section VIII,<br>or implied, concerning the part described in |
| Date Signed   | Со  | mmissions  |  |
|   | Authorized Inspector  |  | rd Authorized Inspector Commission number  |