Guide for Completing Form AB-83F

1.0 PURPOSE

To provide guidance for completing Form AB-83F, Pressure Piping Construction and Test Data Report for piping systems manufactured outside of Alberta.

2.0 APPLICATION

The Pressure Piping Construction and Test Data Report, Form AB-83F, is used for documenting new construction, repairs and alterations to ASME B31.1, B31.3, B31.5, B31.9 pressure piping systems and CSA Z662 steam pipelines manufactured outside of Alberta that are subject to the Safety Codes Act and Regulations. Please refer to PESR User Guide, AB-516, Section 31 to determine which other equivalent forms may be used. The form AB-83F is not to be used for piping systems that are not subject to the Safety Codes Act and Regulations.

For pressure piping systems constructed, repaired or altered in Alberta for use in Alberta, Form AB-83 is to be completed.

3.0 GENERAL

Form AB-83F is required for documenting new construction, repairs and alterations and for certifying that the work was done in accordance with Alberta requirements. The methods of construction, repairs and alterations may be by welding, brazing, mechanical assembly or by bonding. Any welding and/or rework (such as machining) on the pressure components must be documented on Form AB-83F. The latest version is posted on ABSA's website, http://www.absa.ca, under ABSA Form Directory.

An alteration is any change in the item described on the original Pressure Piping Construction and Test Data Report which affects the pressure containing capacity of the pressure retaining item. Non-physical changes such as a change in the design pressure or design temperature of a pressure retaining item are alterations. A reduction in minimum design temperature is also an alteration.

A repair is the work necessary to restore the pressure equipment to a safe and satisfactory operating condition, provided that there is no deviation from the original design.

4.0 INSTRUCTIONS

The following describes the information required for completing each item of Form AB-83F. The numbers in these instructions correspond to the numbers on Form AB-83F.

(1) Check if the report is a final data report.

(2) Check if the report is a partial data report.

Note: A Partial Data Report should be completed only when full compliance with the Safety Codes Act, Regulations and Codes could not be demonstrated. Owners should clarify at the contract stage if a partial or final data report is required. A partial data report is not complete in itself and therefore must be covered by a final AB-83 or AB-83F.

(3) Indicate the name of the contractor who constructed the pressure piping.

(4) Indicate the address of the contractor who constructed the pressure piping.

(5) Indicate the end user's job number.

(6) Indicate the name of the contractor who sublet the work to the contractor named at (3). If the work was awarded to the contractor named at (3) directly by the owner, check off N/A box.

(7) Indicate the address of the contractor who sublet the work to the contractor named at (3). If you checked off the N/A box at (6), leave it blank.

(8) Indicate the end user's name and address.

(9) Indicate the location of the piping system installation.

(10) Indicate the piping system design registration number, if applicable, otherwise indicate N/A. The pressure piping PP number must be indicated if the overall internal volume of the pressure piping system exceeds 500 liters.

An owner's existing PP number must be indicated if an addition or repair or alteration is done where the pressure piping system is previously registered by the owner or previous owner.

(11) If the owner subcontracts the design work to another company, the owner is responsible for the design. Check this box.

(12) If the contractor who manufactured the pressure piping also designed the piping, check this box.

(13) Indicate welding procedure specification (WPS) number(s) for all welding procedures used. If there is insufficient space list the WPSs under 'Remarks' on the back of Form AB-83F. If the owner's weld procedure specifications are used, indicate this in Remarks. Indicate N/A if no welding procedures were used.

(14) Mark the box as applicable, i.e., an ASME Code or CSA Z662 Code for steam pipelines. For the construction of ASME B31.1 Boiler External Piping at locations outside of Canada, A.I.'s inspection and certification of appropriate ASME Data Report is required.

(15) Mark the service category for ASME B31.3 piping systems.

(16) Provide the applicable number(s).

(17) Indicate the fluid that the piping system is designed for.

(18) Indicate the design pressure of the pressure piping system.

(19) Indicate the maximum and minimum design temperatures of the pressure piping.

(20)(21) Provide the test pressure and test medium (e.g. water, glycol, air, etc.), if applicable, otherwise enter N/A. If N/A, the responsibility for completing the pressure test must be indicated in the 'Remarks' section. If the company responsible is not known indicate "pressure test to be done by others" in Remarks.

(22) Provide the material specification and grade for the pipe. If tubing is used, provide the material specification and grade.

(23) Indicate the corrosion allowance for the piping system, if applicable, otherwise enter 0.

(24) Provide the nominal pipe size and schedule for the pipe. If tubing is used, provide the tube outside diameter and nominal wall thickness.

(25) Provide the flange material and rating (e.g. A105N Cl 600). If there are no flanges, enter N/A.

(26) Indicate the design post weld heat treatment and design preheat requirements. (note that for some materials the codes require specific preheats).

(27) State the applicable type(s) of NDE. Standard abbreviations such as VT, RT, PT, MT, UT should be used. It is the responsibility of the owner's inspector to confirm all required examinations have been completed. Details of the examinations, such as the % of radiography, shall be included in a manner acceptable to the owner. If there is insufficient space in (27), describe the nondestructive examination(s) in the 'Remarks' section.

The table from (16) to (27) may be reproduced on a separate sheet and attached to the Form AB-83F if the space provided in the form is not sufficient and/or additional information is included. If a separate sheet is used, specify the piping job no. on the sheet or indicate other information that links the separate sheet to the Form AB-83F for the piping job. Indicate in the table on Form AB-83F or in Remarks to see a separate sheet.

(28) Include any additional information that will not fit into the applicable space(s) provided on the Form AB-83F.

(29) Complete this section. The authorized representative must be an employee of the contractor.

(30) **For piping constructed outside of Canada**, an Authorized Inspector and Owner's Inspector must sign the Certificate of Inspection of AB-83F form.

The Owner's Inspector is not required to visit the fabrication site and perform physical inspections of the pressure piping construction. If the Owner's Inspector does not visit the site to conduct the necessary verifications and inspections, the inspector must conduct the verifications and inspections to the extent necessary to be satisfied that the construction meets the requirements of the engineering design, applicable ASME codes, Safety Codes Act and Regulations upon receipt of the pressure piping at the installation site.

For piping construction in a Canadian jurisdiction other than Alberta:

If the piping contractor holds a valid certificate of authorization issued by the jurisdictional authority:

- If the authorization permits the piping contractor to construct the piping without inspection by the jurisdictional inspector, use ABSA form AB-83 (or equivalent) to document construction. The form must be certified by contractor and by the owner's inspector.
- If the authorization does not permit construction without inspection by the jurisdictional inspector, use ABSA form AB-83F (or equivalent) to document construction. The form must be certified by the contractor and an A.I. who inspected the pressure piping during construction.

If the piping contractor does not hold a valid certificate of authorization issued by the jurisdictional authority:

- Use ABSA form AB-83F. The form must be certified by the contractor and an A.I. who inspected the pressure piping during construction.

Note: All B31.1 Boiler External Piping requires inspection and certification by an Authorized Inspector.

Refer to ABSA publication AB-516 "PESR User Guide" section 31 for additional details.

ABSA
the pressure equipment safety authority

PRESSURE PIPING CONSTRUCTION AND TEST DATA REPORT FOR MANUFACTURERS OUTSIDE OF ALBERTA

Alberta Regulation 49/2006 Section 31(2)

AB-83F 2013-07

Final Data Report ☐ **(1)** **Partial Data Report; (2)** ☐

1. Constructed By: **(3)**

(4) (Address) Job No: **(5)**

2. Constructed For: N/A ☐; **(6)**

(name of the contractor who sublet the work to the contractor named at item # 1. If none, check N/A)

(7)

(address of the contractor who sublet the work to the contractor named at item # 1)

3. Owner: **(8)** (owner's name and address) **(9)** (location of installation)

4. Piping Design Provincial Registration No.: **(10)**

(11)

5 Design Responsibility: Owner ☐; Contractor ☐ .**(12)**

6. Company WPS Nos. Used: **(13)**

7. Code: **(14)** ASME B31.1 Non Boiler External Piping ☐; ASME B31.1 Boiler External Piping ☐
ASME B31.3- ☐; B31.5 ☐; B31.9 ☐; CSA Z662 Steam Pipelines ☐

(15) ASME B31.3 Service Category: Normal ☐, Category D ☐, Category M ☐, High Pressure ☐, Elevated Temp. ☐, High Purity ☐, Severe Cyclic ☐.

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Design Pressure kPa	Design Temp. ^{0}C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Material Spec. & Grade	C.A. mm	Pipe NPS & Sch.	Flange Material & Rating	P.W.H.T. / Preheat Temp. ºC	NDE
(16)	**(17)**	**(18)**	**(19)**	**(20)**	**(21)**	**(22)**	**(23)**	**(24)**	**(25)**	**(26)**	**(27)**

Remarks: **(28)**

(29)

CERTIFICATE OF COMPLIANCE

We certify the statements in this Data Report to be correct and that piping described in this Data Report was constructed in accordance with the Province of Alberta Safety Codes Act and Regulations, and applicable ASME Piping Code(s).

Date _____ _____ by _____

Contractor Signature of Authorized Representative

(30)

CERTIFICATE OF INSPECTION

I, the undersigned, have verified that all required examination and testing has been completed, and inspected the piping described in this construction data report to the extent necessary to be satisfied that it conforms to all applicable examination requirements of the Code and of the engineering design, and state that, to the best of my knowledge and belief, the contractor has constructed this piping in accordance with the applicable ASME Codes. By signing this certificate neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the piping described in this construction data report. Furthermore, neither the inspector nor his or 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.

Owner's Inspector Certification:

Employed by: _____

Name: _____

Signature: _____ Date: _____

Authorized Inspector Certification:

Employed by: _____

Name: _____ NB#: _____

Signature: _____ Date: _____

Please refer to guide AB-83Fa for assistance in completing this form.