



Pressure Piping Construction Requirements QMS written description verification CHECKLIST AB-518(b)

AB-518b 2022-09

Electronic completion of this document is preferred

Company Name: _____

Company Address: _____

Title of the written description of the management system or manual(s):

Person responsible for the overall management of the pressure piping construction program:

Name: _____
(Capital letters)

Title: _____

Telephone No.: () _____

Fax No.: () _____

Cell No.: () _____

E-Mail: _____

Signature: _____ Date: _____
(Electronic signature acceptable)

The "Pressure Piping Construction Requirements" document, AB-518 has been issued by the Alberta pressure equipment safety Administrator to specify requirements for the construction of pressure piping systems. In accordance with the requirements of PESR Section 11(1), anyone who wants to construct pressure piping systems in Alberta is required to obtain a Certificate of Authorization Permit from ABSA.

This checklist AB-518(b) has been developed to assist the applicants and ABSA auditors review the written description of the QMS and verify if it meets the requirements of the AB-518 document and the legislation.

Organizations who wish to make an application for obtaining a Certificate of Authorization Permit in accordance with the requirements of the Pressure equipment Safety Regulation Section 11, shall submit the following documents to ABSA:

- an Application Form AB-29,
- an AB-29(b) Form if applying for multiple shop locations to be certified under the same AQP number (all shops must operate under the same name),
- a copy of the duly endorsed AB-518(b) document showing where each requirement of the AB-518 document has been addressed in the company's QMS, and,
- a draft copy of the written description of the QMS describing the pressure piping construction activity.

Owner/Users who are also authorized to construct pressure piping are required to review their pressure equipment integrity management system documentation and ensure that pressure piping construction activity meets the requirements of AB-518. Owner/Users are not required to submit an AB-518(b) checklist.

ABSA reviewer's comments:

ABSA Auditor's Name: _____
(Capital Letters)

Signature: _____

Date: _____



**Pressure Piping Construction Requirements
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Site Audit records (For ABSA Auditor's use only)

Project Name: _____

Project/W.O./P.O Number: _____

Piping owner: _____

Audit Notes:



the pressure equipment safety authority

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AB-518 Sec. #	AB-518 Requirements	Indicate 'Section & Paragraph #' where the requirement is addressed in written description of your QMS?	ABSA Auditor's use only		
			Site Audit Results Remarks/Objective Evidence	CAR*	Def.*
3.3	Quality Manual Requirements				
	Title Page				
	<p>Is there a Title Page? Section 3.3 does not include requirements for the 'Title Page' of the written description of a QMS or a manual because it is not a document organizing guide. AB-518 stipulates requirements that must be addressed in a QMS. Inclusion of a Title Page to any credible document is common knowledge, however guidelines for developing a written description of a QMS including a 'Title Page' are described in ISIO10013:2001 standard.</p>		<p>Is there an acceptable Title Page? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<u>Reviewer's Comments:</u>				
	Table of Contents				
	<p>Is there a Table of Contents that lists the number and title of each section and its location in the written description of the QMS? Section 3.3 does not include requirements for the 'Table of Contents' of the written description of a QMS or a manual because it is not a document organizing guide. AB-518 stipulates requirements that must be addressed in a QMS.</p>		<p>Is there a Table of Contents that lists the number and title of each section and its location? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<u>Reviewer's Comments:</u>				

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3.3.1	Scope			
	Does this section: <ul style="list-style-type: none"> describe the scope of the activities to be undertaken? 		Is the scope of work undertaken within the scope of work applied for? Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> list the shop locations (i.e. covered under the same registered name); describe scope of work undertaken at each shop location, and the address of each shop; indicate whether activities are undertaken at shop and/or field sites; state the title of a person designated to perform QC function at each site, and, the title of a person who is overall responsible for maintenance and for assuring effective implementation of the QMS at all locations? <p>Note: If an organization does not have a shop, and undertakes field activities only, the organization shall indicate that the activities undertaken are at field sites in Alberta controlled from an office address of the organization.</p>		Is all information as required by this section provided? Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
<u>Reviewer's Comments:</u>				
3.3.2	Definitions of Terms and Acronyms			
	Are terms and acronyms used within the Pressure Piping Construction written quality management system defined?		N/A	<input type="checkbox"/>
<u>Reviewer's Comments:</u>				

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3.3.3	Organization				
	Does this section: <ul style="list-style-type: none"> include a statement that the management will ensure that responsibilities and authorities are defined and are communicated within the organization? 		How are the responsibilities and authorities communicated to the employees?	<input type="checkbox"/>	
	<ul style="list-style-type: none"> describe the organizational structure and identify key positions of personnel who manage and perform work affecting quality? 		Does the organization structure as defined in the QMS manual match with the organization structure in practice? Yes <input type="checkbox"/> ; No <input type="checkbox"/> <ul style="list-style-type: none"> Is the organization structure suitable for the organization? Yes <input type="checkbox"/> ; No <input type="checkbox"/> 	<input type="checkbox"/>	
<u>Reviewer's Comments:</u>					
3.3.4	Statement of Authority and Responsibility				
	Are the following statements made? <ul style="list-style-type: none"> a statement that the documented QMS meets the requirements of the AB-518 document and accurately describes the pressure piping construction processes implemented by the company? 		N/A	<input type="checkbox"/>	
	<ul style="list-style-type: none"> a statement that management will uphold the safety requirements of the SCA & Regulations and resolve any issues regarding quality? 		N/A	<input type="checkbox"/>	

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<ul style="list-style-type: none"> a statement that the quality system has the full support of the management who will ensure that adequate resources, including competent personnel, are provided to implement the program; statement providing the title of the person responsible for the development and maintenance of the pressure piping construction program, with an explanation that this person has the defined authority and responsibility for implementation of the program and has direct access to, and support from, top management to resolve any implementation barriers? 		<p>Is there evidence that the management has provided adequate and competent resources for the construction activities? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p> <p>Does the person responsible for the program have direct access to the top manager? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
<ul style="list-style-type: none"> signature (with date) of the senior management? <p>Note: A new Statement of Authority document signed by senior management, with the current date, is required at the time of renewal of the certification.</p>		N/A	<input type="checkbox"/>	
<u>Reviewer's Comments:</u>				
3.3.5 Management's Responsibilities				
<p>Does this section:</p> <ul style="list-style-type: none"> include a statement and evidence that the management is committed to the development and implementation of a successful pressure piping construction program and that it will continually improve its effectiveness? 		<p>This question should be answered by the auditor upon completion of the audit.</p>	<input type="checkbox"/>	
<ul style="list-style-type: none"> establish that management will review the quality management system at appropriate intervals to ensure its continued suitability and effectiveness, and that records of such reviews will be maintained. 		<p>Is there evidence of owner/management conducting the review? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	



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	<ul style="list-style-type: none"> include a statement that the management shall determine and provide adequate competent human resources and the necessary facilities and equipment to effectively implement the pressure piping construction activities; describe appointment of a member of the organization's management who, irrespective of other responsibilities, shall have responsibility and authority to ensure that QMS processes are established, implemented and maintained, and shall report performance of the QMS to the top management on a periodic basis; state that management will ensure responsibilities and authorities are defined and communicated within the organization; state that management will resolve disagreements concerning the implementation of the QMS; state that management will ensure the QMS remains in compliance with the requirements of this document, SCA, Regulations and applicable codes throughout the term of the certification? 		<p>Is there evidence of owner/management providing leadership, adequate infrastructure, competent resources, effective QMS, training? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
<p><u>Reviewer's Comments:</u></p>					
3.3.6	Contract Review				
	<p>Are/is the:</p> <ul style="list-style-type: none"> responsibilities for contract review and agreement defined? 		<p>Review the contract document for the project and verify that the requirements are addressed. Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> pressure piping construction requirements documented? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Code edition defined? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	

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	<ul style="list-style-type: none"> scope of work defined? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> responsibilities for the supply of materials, construction drawings, design, design registration with ABSA, PWHT and pressure test defined in the contract? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> piping lot sizes for the purpose of NDE specified by the owner and agreed upon between the contracting parties before the start of the construction activities? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> requirement of a turnover package and contents thereof are defined? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> responsibilities for certifying the construction, using AB-83 or AB-83 Partial or AB-83F as the case may be, is defined? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> responsibilities for certifying the installation and readiness for operation using an AB-81 Form is defined? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<u>Reviewer's Comments:</u>					
3.3.7 Document & Data Control					
	<ul style="list-style-type: none"> Are the controls needed for the development, identification, storage, revision, protection, retrieval, retention time, and disposition of records addressed? 		Are these controls being implemented? Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Has a document revision control process been developed and amendments to the documents are authorized by the Certificate of 		Is a controlled copy of an up to date QMS manual available at the site?	<input type="checkbox"/>	



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	<p>Authorization Permit holder, and processed in a manner which will ensure timely availability at the appropriate location?</p>		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>		
	<ul style="list-style-type: none"> • Is there a statement included that no changes are permitted to the QMS documentation that may render a document to be in non compliance with the requirements of the AB-518 document, SCA, Regulations and applicable codes and standards throughout the certification period? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Is a current version of the quality manual provided and accepted by ABSA? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Are all changes to documents managed appropriately including notification to the affected parties? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Are the current issues of the appropriate documentation available at all relevant locations and to all relevant persons? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Are superseded documents removed from use throughout the organization or are appropriately identified as superseded documents? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Is the current revision status of documents identified? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Are the documents legible, readily identifiable and retrievable? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Are documents of external origin identified and their distribution controlled? 		<p>Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	

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Reviewer's Comments:

3.3.8	Piping Design			
	<u>Scenario 1</u>		Check N/A <input type="checkbox"/> if scenario 1 does not apply to you.	
	If a pressure piping design is undertaken in-house by a manufacturer or by an owner who is also a manufacturer:			
	<ul style="list-style-type: none"> Are design requirements such as the operating conditions, service requirements and other information needed to facilitate the safe design, construction, and inspection of the pressure piping system identified and documented? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are the personnel assigned to engineer the piping systems competent, and do they meet the qualification requirements of the company and of the applicable ASME B31 Code(s)? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are the design documents stamped by a P.Eng when a pressure piping system is required to be registered with ABSA? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are piping design documents prepared, verified and approved by the owner? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Do the design documents provide information about the code of construction including edition, proper material specifications, design pressure, maximum and minimum design temperatures, ASME B31.3 fluid category for process piping, type and extent of NDE required, hydro test pressure and medium, Pre Heat and PWHT treatment requirements, joint design details, WPS and dimensions? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>

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	<ul style="list-style-type: none"> Are the design code edition and addenda of the applicable ASME construction codes, standards and other related documents available to design personnel and applied for pressure piping design? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Do all design documents, including any revisions, have the required approval and are the revised documents made available at the point of use? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Is an appropriate management of change process utilized to manage changes to the design? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> If the piping system's internal volume exceeds 500 liters, are the design registration requirements with ABSA specified? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are the drawings reviewed and approved by engineering prior to release for construction? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<p><u>Scenario 2</u></p> <p>If a pressure piping design is completed by an owner or contracted out to a designer by an owner:</p>			Check N/A <input type="checkbox"/> if scenario 2 does not apply to you.		
	<ul style="list-style-type: none"> Are competent in-house engineering resources assigned to prepare design basis memorandum (DBM) that identifies the design and operating conditions, the service requirements and other information needed to facilitate a safe design, construction and inspection of the pressure piping system. When no in-house engineering resources are available, is a process for contracting out the preparation of the DBM described? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Is the DBM reviewed, approved and provided to the designer by the owner prior to the start of the design activity? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	



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	<ul style="list-style-type: none"> Is the designer competent and meets the pressure piping design, code knowledge and qualification requirements of the owner, and of the applicable ASME B31 Code(s)? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are current ASME Codes available to the designer? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Do the design documents prepared by the designer provide information about the code of construction including edition, proper material specifications, design pressure, maximum and minimum design temperatures, ASME B31.3 fluid category for process piping, type and extent of NDE required, hydro test pressure and medium, preheat and PWHT treatment requirements, joint design details, WPS and dimensions? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are the owner's responsibilities assigned for the verification and acceptance of the design documents, including those received back from the designer? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> If the piping system's internal volume exceeds 500 liters, is responsibility for the registration of the design with ABSA assigned? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are the drawings reviewed and approved by the owner prior to release for construction? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<u>Scenario 3</u>			
	If pressure piping design is supplied to the manufacturer by the owner:	Check N/A <input type="checkbox"/> if scenario 3 does not apply to you.		
	<ul style="list-style-type: none"> Verification that the construction drawings and/or other engineering documents received from the owner include information about the code 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	

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	<p>of construction including edition, proper material specifications, design pressure, maximum and minimum design temperatures, ASME B31.3 fluid category for process piping, type and extent of NDE required, hydro test pressure and medium, preheat and PWHT treatment requirements, joint design details, WPS and dimensions, or, the information needed for construction of the piping is made available through other appropriate documentation by the owner?</p>				
	<ul style="list-style-type: none"> • When spool drawings or cut sheets are prepared by the manufacturer, are the drawings or cut sheets controlled and linked to the owner-supplied construction or design drawings? 		N/A <input type="checkbox"/> ; Yes <input type="checkbox"/> ; No <input type="checkbox"/>		<input type="checkbox"/>
	<ul style="list-style-type: none"> • Are the drawings reviewed and approved by the manufacturer prior to release for construction? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>		<input type="checkbox"/>
<p><u>Reviewer's Comments:</u></p>					
<p>3.3.9 Purchasing and Material Control</p>					
	<ul style="list-style-type: none"> • Purchasing: Has the manufacturer: <ul style="list-style-type: none"> ▪ specified purchasing responsibilities? 		Is purchasing being done by qualified personnel? Yes <input type="checkbox"/> ; No <input type="checkbox"/>		<input type="checkbox"/>
	<ul style="list-style-type: none"> ▪ specified the process for the purchasing of materials and for ensuring conformance to the material requirements of the engineering design and requirements of the owner? 		Are the materials properly specified in the P.O. and meet the requirements of the engineering design? Yes <input type="checkbox"/> ; No <input type="checkbox"/>		<input type="checkbox"/>
	<ul style="list-style-type: none"> ▪ ensured that the fittings ordered are registered with ABSA (have 		Is documentation confirming		<input type="checkbox"/>

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	valid CRN for installation in Alberta)?		CRN available? Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
	<ul style="list-style-type: none"> ▪ specified the process for controlling purchase documents? 		Are the specified controls in practice? Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Control of Owner supplied materials: Has the manufacturer established a process for verification, storage and maintenance of owner supplied materials? 		Is the process in practice? Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Receiving of materials: Has the manufacturer ensured that: <ul style="list-style-type: none"> ▪ received materials conform to the correct specifications and quantity, and are not damaged? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> <ul style="list-style-type: none"> ▪ a process is established for identifying and disposing of non-conforming items? 		Is the process in practice? Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • Materials Identification and Traceability: Has the manufacturer established a process for identification of pipes, fittings, bolting, welding consumables and other materials used for piping fabrication while in storage and during construction activities? 		Is the process in practice? Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	Reviewer's Comments:				
3.3.10	Construction of Pressure Piping				
	Has the manufacturer ensured that: <ul style="list-style-type: none"> • a fabrication plan is developed and reviewed with personnel? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	



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	<ul style="list-style-type: none"> an ITP (and/or a Construction Travel Sheet) and a project file are initiated prior to the start of the project and maintained? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the owner's inspector assigned to the job by the owner is informed prior to the start of the project for the purpose of reviewing the ITP (and/or a Construction Travel Sheet), other construction documents and for assignment of inspection hold points? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> up to date and approved (by the QC manager) drawing(s) is/are available for the construction. When no design drawings or spool drawings are supplied by the owner and the spool drawings are prepared by the contractor, documented approval shall be obtained from the owner to ensure that the design, material, fabrication, NDE, PWHT, hydrotest and any other information specified within the prepared drawings is accurate? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the materials are available, issued for construction and checked for conformance with the engineering design prior to start of fabrication? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> welding and other fabrication activities are monitored and documented during production? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the WPS specified in the engineering design are suitable for the job. When no WPS and dimensions are specified by the designer, is the process for assigning the WPS and dimensions in coordination with the owner specified? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> copies of the registered WPS are available to the welders, and are understood and implemented effectively? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the welders are qualified for the job and records of the welders qualification are maintained, including evidence the welder has maintained qualification (i.e. continuity records) as applicable? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	



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	<ul style="list-style-type: none"> the inspection and examination stages are identified, carried out in accordance with the acceptance standards, documented, verified and records maintained? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the process for defining the extent of NDE, identification of spools, supply of NDE instructions to the NDE company, review of radiographs and reports and acceptance is defined and documentation maintained? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> for ASME B31.1 Boiler External piping, ABSA inspection and certification is achieved? 	N/A <input type="checkbox"/> ; Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the PWHT is completed in accordance with the requirements of the engineering design, verified and documented? 	N/A <input type="checkbox"/> ; Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the pressure testing is accomplished in accordance with requirements of the engineering design and codes, and documented? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> the completed job is certified using an AB-83 Form, a copy is supplied to the owner and records maintained. When a job partially meets the requirements of the SCA, Regulations and applicable ASME B31 code(s) a partial AB-83 Form shall be completed and provided to the primary contractor? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> when the piping system was originally registered with ABSA, unless specified otherwise by the contract, an AB-81 form is completed prior to the operation and submitted to ABSA? 	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<u>Reviewer's Comments:</u> 				



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3.3.11 Post Weld Heat Treatment (PWHT)				
3.3.11	Has the manufacturer:			<input type="checkbox"/>
	<ul style="list-style-type: none"> assigned responsibilities for the implementation and maintenance of the PWHT procedures? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	
	<ul style="list-style-type: none"> verified that the PWHT requirements are defined in the engineering design/drawings or otherwise made available by the owner? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> ensured that the PWHT activities are executed in accordance with the requirements of the engineering design? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> ensured that the piping spools designated for PWHT are identified? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> ensured that the PWHT instructions for the piping are prepared and supplied to the heat treatment contractor? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> ensured that upon completion of the PWHT of the piping, it is inspected for damage and to confirm identification, and the PWHT documentation is verified? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> maintained PWHT documentation? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
<u>Reviewer's Comments:</u>				
3.3.12 Nondestructive Examinations and Testing				



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<p>Has the manufacturer ensured that:</p> <ul style="list-style-type: none"> • the NDE required for the pressure piping fabrication is determined from the design documents provided by the owner? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • a lot size is established in agreement with the owner? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • procedures used for performing NDE are documented and meet requirements of the current Regulations, ASME Section V and the applicable ASME B31 Code of construction? 		<p>Has the manufacturer verified that the procedures used by the NDE company meet the requirements of the regulations and the codes? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • the NDE interpretations are performed by SNT-TC-IA Level II or III technicians? 		<p>Verify Radiographic reports. Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • the written instructions for performing NDE are provided to the technicians performing NDE? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • the process for identifying the welding joints requiring NDE is documented? 		<p>Is the process in practice? Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • the NDE is performed to meet the specified NDE for each lot? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • the radiographic film and reports are reviewed and accepted by the manufacturer's QC personnel? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • the NDE documents are kept on file for a specified period of time? 		<p>Review past files. Yes <input type="checkbox"/> ; No <input type="checkbox"/></p>	<input type="checkbox"/>	

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	<u>Reviewer's Comments:</u>			
3.3.13 Examination <small>(Examination and inspections activities performed by the manufacturer)</small>	<ul style="list-style-type: none"> Are the responsibilities for the examination activities and qualifications of an examiner defined? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are visual examination procedures and personnel qualifications for visual examination, as required by the applicable code of construction, established and documented? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are the examinations specified for various stages of construction conducted? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are QMS examination requirements and associated procedures available and understood by the personnel responsible for the examination activities? 		Confirm availability of documents at the point of use and verify understanding through personnel interviews. Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are the materials received from the owner(s) and supplier(s) examined to assure conformance with the requirements of the engineering design? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are the 'partial' piping systems and documents received from the subcontractors examined prior to release for further processing? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>
	<ul style="list-style-type: none"> Are the partial piping turnover packages received from manufacturers within Alberta accompanied by 'Partial AB-83' forms? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>

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	<ul style="list-style-type: none"> Are the piping systems and documentation received from pressure piping fabrication contractors located outside of Alberta accompanied by Final/Partial 'AB-83F' or AB-83 forms as the case may be and that the systems and documentation are examined prior to release for further processing? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are completed piping systems and documents received from manufacturers from within Alberta accompanied by 'AB-83' forms and are examined prior to release. 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Is the final examination carried out in accordance with the documented procedures, to complete the evidence of conformance of the finished product to the specified requirements? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are the examination records maintained? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> For ASME B31.1 Boiler External Piping, is ABSA's inspection requirement addressed? 		ABSA's inspection enabled when required? N/A <input type="checkbox"/> ; Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<p><u>Reviewer's Comments:</u></p>					
3.3.14	Pressure Testing				
	<ul style="list-style-type: none"> Is a documented procedure in place and understood by the personnel responsible for conducting the pressure tests? 		Confirm availability of the procedure and verify understanding through personnel interviews. Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Is over pressure prevented during the pressure test? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	

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	<ul style="list-style-type: none"> Are the pressure test areas secure and safe for all personnel? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Is the procedure effective and meets the requirements of the engineering design and the code of construction? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Is the pressure test procedure being complied with? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are the pressure gauges calibrated and of proper range? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are the required examinations carried out by qualified personnel? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> Are the pressure test records maintained? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
	<ul style="list-style-type: none"> for ASME B31.1 Boiler External Piping, are prior arrangements made with ABSA to enable a SCO to inspect and witness the pressure test? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>	
<p>Note: Provision for pneumatic testing of pressure piping systems up to 1677 kJs of stored energy (equivalent to 500 liters internal volume and 2172 kPa internal pressure) may be included as a standard testing procedure in the written description of a QMS provided the description/procedure complies with the requirements of AB-522 document and that ABSA's acceptance is secured. AB-532 provides the minimum requirements for the registration of application-specific pneumatic test procedures that do not fall within the scope of AB-522.</p>					
<p>Note: Piping contractors should also be aware of the requirements (AB-519) for alternative test methods that may be accepted for ASME B31.3 closure welds in lieu of the hydrostatic leak testing specified by the PESR. To be eligible for the alternative test methods, either; i) the owner must have an ABSA accepted AB-519 compliant procedure as part of their certified Pressure Equipment Integrity Management System, or ii) the registered piping design must incorporate alternative test provisions for closure welds?</p>					
<p><u>Reviewer's Comments:</u></p>					
3.3.15	Control of Monitoring and Measuring Devices				

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	<p>Has the manufacturer ensured that:</p> <ul style="list-style-type: none"> • a process is developed for determining which measurements are required to be taken during the construction, examination and testing of pressure piping and for selecting the appropriate equipment that is capable of providing the necessary accuracy and precision? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
	<ul style="list-style-type: none"> • inspection, measuring and test equipment is identified, calibrated and adjusted at prescribed intervals, and that the equipment is verified to be in good condition prior to use? 		Sample the equipment. Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
	<ul style="list-style-type: none"> • the equipment is calibrated against internationally or nationally recognized standards? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
	<ul style="list-style-type: none"> • the process employed for the calibration, and for keeping details of equipment, unique identification, location, frequency of calibrations and checks, calibration method, acceptance criteria and action to be taken when the calibration results are unsatisfactory, is defined? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
	<ul style="list-style-type: none"> • calibration records of the equipment are maintained? 		Sample records. Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
	<ul style="list-style-type: none"> • the handling, preservation and storage of the equipment is such that the accuracy and fitness for purpose could be assured? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
	<ul style="list-style-type: none"> • a method for safeguarding the equipment from unauthorized adjustments is defined? 		Yes <input type="checkbox"/> ; No <input type="checkbox"/>		
<p><u>Reviewer's Comments:</u></p>					

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3.3.16	Competency and Training			
	Has the manufacturer established and is continuing to maintain a documented plan for the training of personnel responsible for the construction of pressure piping?		Verify records and note the results below.	<input type="checkbox"/>
	Does the training plan include requirement for identifying training needs, providing training, making assessment to assure competency and maintenance of records?			<input type="checkbox"/>
	<u>Reviewer's Comments</u>			
3.3.17	Corrective and Preventive Action			
	Has the manufacturer:		Verify records and note the results below:	<input type="checkbox"/>
	<ul style="list-style-type: none"> ensured that a documented procedure for Corrective and Preventive Action program is in place? 			<input type="checkbox"/>
	<ul style="list-style-type: none"> ensured that the procedure identifies the Forms and includes steps to identify the non-conformity, immediate action to dispose of the non-conformity, root cause analysis to determine the action in order to prevent it from happening again, and, to verify the effectiveness of the corrective action taken? 			<input type="checkbox"/>
	<ul style="list-style-type: none"> ensured that training is provided for the implementation of the Corrective and Preventive Action program? 			<input type="checkbox"/>



Pressure Piping Construction Requirements QMS MANUAL & AUDIT CHECKLIST AB-518(b)

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	<ul style="list-style-type: none"> • reviewed the Corrective Action and Preventive Action Reports/Forms and logs on a periodic basis, evaluated, established trends and initiated improvement measures? 			<input type="checkbox"/>	
	<ul style="list-style-type: none"> • controlled the Corrective and Preventive Action documents? 			<input type="checkbox"/>	
	<ul style="list-style-type: none"> • ensured that the records are available for review to the management? 			<input type="checkbox"/>	
<u>Reviewer's Comments</u>					
3.3.18 Internal Audits					
	Has the manufacturer: <ul style="list-style-type: none"> • developed an Internal Audit process and/or procedures? 		Verify records and note the results below:	<input type="checkbox"/>	
	<ul style="list-style-type: none"> • prepared a schedule for conducting the Internal Audits? 			<input type="checkbox"/>	
	<ul style="list-style-type: none"> • carried out the Internal Audits? 			<input type="checkbox"/>	
	<ul style="list-style-type: none"> • documented the audit results? 			<input type="checkbox"/>	
	<ul style="list-style-type: none"> • communicated the audit results to the appropriate personnel and management? 			<input type="checkbox"/>	



Pressure Piping Construction Requirements QMS MANUAL & AUDIT CHECKLIST AB-518(b)

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	<ul style="list-style-type: none"> ensured that timely action is taken as a result of the audit findings? assured that follow-up action to verify the success of the corrective action taken is defined? defined maintenance of the records? conducted a periodic review of the audit system and reported the results to the management? 			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 	
<u>Reviewer's Comments:</u> 					
3.4	Are the quality management system personnel knowledgeable, meet the requirements of section 3.4 of AB-518 document and provide competent services at the construction site?	Yes <input type="checkbox"/> ; No <input type="checkbox"/>	<input type="checkbox"/>		<u>Reviewer's Comments:</u>