



RP 1.0A: INSPECTION AND CERTIFICATION OF SUBSTRUCTURES

A Recommended Practice (RP) for the
Canadian Land-Based Drilling and Well
Servicing Industry

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Table of Contents

Introduction	ii
History.....	ii
Range of Obligation	iii
Review Process.....	iii
Revision Schedule	iii
1. Scope	4
2. Inspection Types.....	4
2.1 Level I Inspection.....	5
2.2 Level II Inspection.....	5
2.3 Level III Inspection.....	6
2.4 Level IV Inspection and Certification	8
3. Contact with Critical Substructure Components	10
4. Inspection Frequency	10
5. Repairs, Maintenance and Documentation.....	11
6. Personnel Qualification, Training and Documentation.....	13
7. Appendix 1: Level III/IV Substructure Inspection Form	16

Introduction

The Canadian Association of Oilwell Drilling Contractors (CAODC) Engineering & Technical (E&T) Committee has developed a Recommended Practice (RP) for substructures. This document dated December 2019 supersedes all prior editions of this Recommended Practice.

The information contained herein is a recommendation only of certification schedules for substructures currently utilized in the Canadian drilling and well servicing industry. An attempt has been made to establish some practical recommended operating practices for substructures equipment in the Canadian drilling and well servicing industry.

The recommendations contained in this document should be considered in conjunction with the requirements of the original equipment manufacturers (OEM). Companies should operate and maintain the equipment within the operating limitations, such as load ratings, as designed by the OEM.

If the OEM stipulates increased levels of inspection or accelerated inspection/certification cycles, the contractors must follow the OEM guidelines unless granted approval to follow this CAODC Recommended Practice by a Professional Engineer (P. Eng).

CAODC has produced this Recommended Practice based on industry experience. However, this document should be considered in conjunction with all relevant legislation and the requirements of provincial regulatory authorities. This document should not be construed as a legal opinion, and users are advised to seek legal counsel to address their specific facts and circumstances.

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History

At the request of the Engineering & Technical and Safety & Technical Committees, CAODC Recommended Practice 3.0A section on substructures was deleted and the RP 1.0A practices adopted. This was because of the extremely small number of substructures in Canada used on service rigs.

Range of Obligation

Throughout this RP the terms ‘must’, ‘shall’, ‘should’, ‘may’, and ‘can’ are used as indicated below:

Term	Usage
MUST	A specific or general regulatory and/or legal requirement that must be followed.
SHALL	An accepted industry practice or provision that the reader is obliged to satisfy to comply with this RP.
SHOULD	A recommendation or action that is advised.
MAY	An option or action that is permissible within the limits of the RP.
CAN	Possibility or capability.

Review Process

CAODC Recommended Practices are reviewed and revised, reaffirmed, or withdrawn at least every three years. A one-time extension of up to two years may be added to this review cycle. Email any comments or items of concern to rpfeedback@caodc.ca.

Revision Schedule

Revision Date	Revision Details
Edition 1	Sanctioned, 1995
Edition 2	Revised, 2001
Edition 3	Revised, August 2012
Edition 4	Revised, April 2015
	– Provision to allow major repairs in field, revised
Edition 5	Revised, October 2016
	– Content standardized and reformatted for alignment
Edition 6	Revised, December 2019
	– 1000 Day Inspection Extension Change

1. Scope

- 1.1 This recommended practice (RP) describes the inspection and certification schedule for substructures currently utilized in the Canadian drilling industry, and is intended to ensure the safe and reliable operation by emphasizing how it is handled and/or repaired.
- 1.2 All structural load paths, load bearing members, mounts, and components.
- 1.3 Any new load bearing attachment points must be certified by a [Professional Engineer](#) or [OEM Agent](#) and identified with a capacity rating.
- 1.4 The application of loads to members within the substructure, not considered in the original design, must be approved and certified by a [Professional Engineer](#) or [OEM Agent](#).

2. Inspection Types

To ensure that substructures are properly maintained and serviceable, six levels of inspection are recommended. At the time of scheduling inspection work, it is advised that the OEM agent or certifying Professional Engineer is contacted to ensure any related Safety or Product Bulletins are included in the scope of work:

2.1 Pre and Post Move Inspection

- 2.1.1 When transporting a substructure it is imperative that damage does not occur to the critical structures within the substructure. To prevent damage from occurring:
 - a) Proper handling procedures must be observed;
 - b) Affected personnel must be trained accordingly, and
 - c) A pre-move safety meeting must take place that includes discussion on the location of the lifting points to be used as well as any other handling issues unique to the substructure.
- 2.1.2 To ensure damage has not occurred to the substructure, pre-move (loaded) and post-move (unloaded) visual inspections must be performed.
- 2.1.3 **Pre and Post Move Inspection Personnel**
Pre and post move inspections should be performed by both the Rig Manager and the trucking company representative.
- 2.1.4 **Pre and Post Move Inspection Documentation**
Pre and post move inspections should be documented and retained according to company policy and procedures.

2.2 Level I Inspection

A Level I inspection is a visual observation of the equipment prior to, and/or during operation, and/or during routine maintenance.

2.2.1 Level I Inspection Personnel

Level I inspections are performed by [Operating Personnel](#) as described in Section 6.1.2, and should also be included as part of the daily rig walk around carried out by the Driller or Rig Manager.

2.2.2 Level I Inspection Documentation

Level I inspections shall be recorded in the tour sheet.

2.3 Level II Inspection

2.3.1 A Level II inspection is a Level I inspection that includes a more thorough inspection of critical load path areas including substructure mounted utility sheaves that involves checking for:

- a) Proper lubrication;
- b) Obvious external cracks;
- c) Damage and/or premature wear or deterioration;
- d) Missing parts or guards.

2.3.2 Substructure mounted utility sheaves should be thoroughly checked for:

- a) Excessive wear, damage or cracking;
- b) Proper line size, and lubrication;
- c) Unrestricted rotation.

2.3.3 Sheave and wire rope retention shall be included in the inspection of all sheave applications.

2.3.4 Level II Inspection Personnel

Level II inspections are performed by Operating Personnel, as described in Section 6.1.2. Level II inspections should be carried out by the Driller or Rig Manager.

2.3.5 Level II Inspection Documentation

Level II inspections shall be recorded in the tour sheet.

2.4 Level III Inspection

2.4.1 Upon reaching the required number of operating days, as outlined in [Section 4 - Inspection Frequency](#), substructures shall be Level III inspected. At a minimum, a thorough visual inspection of the following critical components is required, if applicable:

- a) Mast pinning stools;
- b) Rotary table beams and supports;
- c) Racking floor beams and supports;
- d) Main beams supporting stools;
- e) BOP handling system, if applicable;
- f) Walking/Skidding System components;
- g) All other components deemed critical by the certifying party.

2.4.2 The substructure must be clean and all load bearing components, as determined by either a Professional Engineer or OEM Agent as described in [Section 6.1 - Personnel Qualifications](#), must be accessible for inspection. Any components with suspected damage are to be NDT inspected.

2.4.3 All Level III inspections shall adhere to the minimum requirements outlined in the CAODC Level III/IV Substructure Inspection Summary Form and Checklist contained in this document.

2.4.4 Operations Level III

The Operations Level III inspection requires the substructure & rig equipment to be cleaned and inspected in the field to determine serviceability and may include or require:

- a) Non-destructive testing (NDT) techniques on critical areas, and load bearing components;
- b) Some disassembly as required;
- c) Outside technical assistance.

2.4.5 Professional Engineer (P.Eng) Level III

The Professional Engineer (P.Eng) Level III inspection requires the substructure & rig equipment to be lowered, on the ground, cleaned and visually inspected in the field to determine serviceability and at the certifying party's discretion, may include or require:

- a) Non-destructive testing (NDT) techniques on critical areas, and load bearing components;
- b) Some disassembly as required;
- c) Depending on history and equipment condition, rigs can carry on under the existing 100 day extension, or if approaching 1000 operating days, must either;
 - i. Complete a full Level IV and zero the days, or;
 - ii. Adopt the P.Eng Level III with a 1250 day carry over certification. A Level IV would then be required at the end of the 1250 day carry over to summate less than 2500 total operating days, then requiring a Level IV. Matching days with equipment in other RP's would be a consideration to align equipment frequencies.

2.4.6 All repairs required should be done in accordance with [Section 5 - Repairs, Maintenance and Documentation](#).

2.4.7 Level III Inspection Personnel

Personnel qualified to supervise and/or provide technical assistance for a Level III inspection include [Inspection Personnel](#), [NDT Technicians](#), [Professional Engineer's](#) and [OEM Agents](#).

2.4.8 Level III Inspection Documentation

Level III inspections shall be documented in the CAODC Mast and Overhead Equipment Log Book, or suitable equivalent.

(DR) With the introduction of the Professional Engineer Level III at 1250 days, it is preferred that the original certifying party performs this work. In the situation where this is not possible, a different Professional Engineer is permissible. In either case, a 1250 day "carry over" Certification shall be provided to the owner. Note that certification liability durations vary by company and region.

Additionally, after the P.Eng Level III is performed, owners must complete and submit the CAODC Level III/IV Substructure

Inspection Summary Form contained in this document and submit to rpfeedback@caodc.ca to satisfy conditions outlined in CAODC Technical Information Bulletin T-19-05.

NOTE: The 1250/2500 operating day frequencies do not currently apply to Service Rigs (SR)

2.5 Level IV Inspection and Certification

- 2.5.1** A Level IV inspection requires the substructure & rig equipment to be disassembled as required to do a complete inspection and may, at the certifying party's discretion, include NDT of all critical load bearing components.
- 2.5.2** Upon reaching the required number of operating days, as outlined in [Section 4 - Inspection Frequency](#), the entire substructure shall be Level IV inspected. At a minimum, the following procedure is required:
- a) Clean substructure as directed or required by the certifying party;
 - b) Inspect the following critical components of the substructure, if applicable:
 - i. Mast pinning stools;
 - ii. Rotary table beams, and supports;
 - iii. Racking floor beams, and supports;
 - iv. Main beams supporting stools;
 - v. BOP handling system;
 - vi. Walking/Skidding System components;
 - vii. All other components deemed critical by the certifying party.
- 2.5.3** Inspection requirements will be at the discretion of the certifying party.
- 2.5.4** Any repairs required should be done as described in [Section 5 – Repairs, Maintenance and Documentation](#).

2.5.5 Level IV Inspection and Certification Personnel

Personnel qualified to perform a Level IV inspection typically include either a [Professional Engineer](#) or [OEM Agent](#).

2.5.6 Level IV Inspection and Certification Documentation

A certification document will be provided by the certifying party and should include the following:

- a) Items outlined in the CAODC Level III/IV Substructure Summary Form and Inspection Checklist;
- b) Document author;
- c) Date and period of certification;
- d) Substructure serial number (if available);
- e) Name of manufacturer (if available);
- f) Date of manufacture (if available);
- g) Manufacturer or Professional Engineer rating (if applicable);
- h) Load rating of the BOP handling system;
- i) Results of the Level IV inspection;
- j) Location of repairs (if applicable).

2.5.7 Level IV inspections must be documented in the CAODC Mast and Overhead Equipment Log Book, or suitable equivalent, and signed by the certifying party.

A 2500 day Level IV Certification shall be provided to the owner. Note that certification liability durations vary by company and region.

Additionally, owners must complete and submit the CAODC Level III/IV Substructure Inspection Summary Form contained in this document to rpfeedback@caodc.ca to satisfy conditions outlined in CAODC Technical Information Bulletin T-19-05.

3. Contact with Critical Substructure Components

- 3.1 If during a Level III, P.Eng Level III or IV inspections it becomes apparent that routine rig operations have resulted in, or may result in, a regular occurrence of significant contact with critical components of the substructure, suitable equipment or procedures must be utilized to prevent damage. This may include the installation of sacrificial plating:
- a) Any sacrificial plates or other equipment installed for this purpose must be certified by either a [Professional Engineer](#) or [OEM Agent](#);
 - b) Deflection plates, if required, should be installed so as not to hamper the line of sight, or functioning of components.

4. Inspection Frequency

- 4.1 At a minimum, the inspection frequency for (DR) substructures shall be conducted in accordance with the schedule below:

Documentation	Inspection Interval											
	Daily	Raise & Lower	250 Days	500 Days	750 Days	1000 Days	1250 Days	1500 Days	1750 Days	2000 Days	2250 Days	2500 Days
Tour Sheet	I	II										
Mast and Overhead Equipment Log Book			III	III	III	III	III (P.Eng)	III	III	III	III	IV (P.Eng)

- 4.2 At a minimum, the inspection frequency for (SR) substructures shall be conducted in accordance with the schedule below:

Documentation	Daily	Raise & Lower	250 Days	500 Days	750 Days	1000 Days
Tour Sheet	I	II				
Mast and Overhead Equipment Log Book			III	III	III	IV

- 4.3 Should circumstances arise where OEM recommendations or individual experience dictate otherwise, CAODC member companies may conduct these inspections at greater frequencies.

- 4.4 (DR) One operating day = 24 accumulated operating hours from spud to rig release.
- 4.5 (SR) One operating day = 24 accumulated operating hours consisting of time over the well, mast standing, crew active and transportation time (the same as a billable hour). Reference CAODC Technical Information Bulletin T-19-04.

5. **Repairs, Maintenance and Documentation**

- 5.1 Occasionally repairs and/or maintenance following a Level III, P.Eng Level III, or IV inspections may be required to retain the operating integrity of the equipment.
- 5.2 Any damage that requires repair will be categorized as minor or major.
- 5.3 If there is any question as to whether the damage is minor or major, either a [Professional Engineer](#) or [OEM Agent](#) must be consulted.
- 5.4 Minor damage includes damage to:
 - a) Ladders;
 - b) Skids;
 - c) Stairs;
 - d) Non-structural cosmetic shells;
 - e) Personnel walkways & platforms on subs (fold down wings).

5.4.1 **Minor Damage Repair Personnel**

Minor repairs may be completed by [Operating Personnel](#), at the discretion of the Rig Manager or higher authority, and do not require certification.

- 5.5 Major damage includes the following:
 - a) Structural Repairs to:
 - i. Rotary table beams that require welding or replacement;
 - ii. Setback area beams that require welding or replacement;
 - iii. Lifting structure and raising load points;
 - iv. Mast pinning stools;

- v. Mast saddles;
- vi. Locking assemblies on telescopic subs;
- vii. BOP Handlers;

b) Repairs or replacement to the main substructure frame.

5.5.1 All major damage must be repaired and, upon completion requires NDT inspection and documentation in the form of a repair certification. Post repair inspections must follow Section 2.5.1

5.5.2 Re-certification provides an opportunity to certify existing attachment points suitable to the typical working environment of the mast.

5.5.3 Repairs may be completed in a field environment provided they can be performed adequately and are accessible for NDT inspection.

5.5.4 All major repairs shall be completed with the assistance of a [Professional Engineer](#) or [OEM Agent](#) approved procedure. The certifying party would supply the repair facility with a repair procedure and provide notes on the repair certification.

5.5.5 **Major Damage Repair Personnel**
Personnel qualified to complete major repairs include either a [Professional Engineer](#) or [OEM Agent](#).

5.6 **Repair and Maintenance Documentation**

5.6.1 All repairs and maintenance performed shall be documented in the CAODC Mast and Overhead Equipment Log Book, or suitable alternative, and include the following information:

- a) Date repairs and/or maintenance was conducted;
- b) Description of repairs and/or maintenance that was completed;
- c) For minor repairs, the [Operating Personnel](#) that completed the repair and/or maintenance;
- d) For major repairs, the certifying party of the repair, including signature.

5.6.2 Major Repair Documentation (Recertification)

5.6.2.1 The certifying party will provide a certification document for the equipment requiring major repairs;

5.6.2.2 Repair certification is issued for the repair of actual damage and is intended to maintain Level IV certification. It does not extend the Level IV certification requirements unless a complete Level IV inspection is conducted in accordance with [Section 2.4 - Level IV Inspection and Certification](#).

6. Personnel Qualification, Training and Documentation

6.1 Personnel Qualifications

It is the responsibility of equipment owners to ensure that individuals involved in the inspection, repair, and certification of substructures are properly qualified, trained, and competent in their respective roles through documented education, training or experience as outlined in Section 6.2. Role specific requirements are listed below.

6.1.1 Inspection Personnel

Typical Inspection Personnel are considered to be individuals designated by the company that have:

- a) Knowledge of working principles of the equipment referenced in this RP;
- b) Mechanical competency in the disassembly of the equipment type and model, and
- c) Experience and knowledge in drilling and/or service rig maintenance.
- d) P.Eng Level III Training in accordance with this RP for individuals other than Professional Engineers, and OEM agents.

Examples of Inspection Personnel include: Professional Engineers, OEM Agents, Mechanical and/or Maintenance Managers and senior operations personnel such as Rig Managers, Field Superintendents, Technologists, Rig-up Superintendents, Shop Foremen, and Operations Managers.

6.1.2 Operating Personnel

Typical Operating Personnel are considered to be members of the rig crew that have:

- a) Knowledge of working principles of the equipment referenced in this RP, and
- b) Experience and knowledge in drilling and/or service rig maintenance.

6.1.3 NDT Technicians

At a minimum, NDT Technicians are required to have Level II, Canadian Government Standards Board (CGSB) certification or other approved certification/training at the discretion of the certifying party.

6.1.4 Professional Engineers

Professional Engineer's shall have:

- a) Previous experience and training in structural and/or mechanical analysis;
- b) A practical working knowledge of equipment referenced in this RP;
- c) Previous experience and training in the repair of the equipment referenced in this RP;
- d) Experience with general quality control standards, and
- e) Professional status in Canada.

6.1.5 Original Equipment Manufacturers (OEM)

The company who built the original piece of equipment under inspection.

6.1.6 Original Equipment Manufacturer Agent

A designate of the OEM that has a practical working knowledge of the specific equipment under inspection.

6.1.7 Welders

Welders must hold a valid Journeyman Welder certificate and have experience in drilling and/or service rig maintenance.

6.2 Personnel Training

- 6.2.1** To satisfy provincial regulations and ensure that equipment will operate in the manner for which it was designed, [Inspection](#) and [Operating Personnel](#) shall be adequately trained to conduct inspections (including visual) in accordance with this Recommended Practice.

(DR) In reference to CAODC Technical Information Bulletin T-19-05, the operating frequencies within this RP are approved based on several conditions including but not limited to improvements and focus on the Level III inspections, competencies, documentation, and training.

NOTE: The 1250/2500 operating day frequencies do not currently apply to Service Rigs (SR).

- 6.2.2** At a minimum, owner companies must arrange Level III training for personnel outlined in Section 6.1.1 with the content of this RP, and the CAODC Level III/IV Mast Inspection Summary Form and Checklist. Training sessions shall be performed by a Professional Engineer once every 5 years for each person designated by the company to perform this work.

6.3 Personnel Documentation

Companies shall have a process in place that documents and retains all training administered to company designated personnel referenced in this Recommended Practice and must include the following.

- Date of training
- Location of training
- Names and signatures of attendees.
- Names and signatures of Professional Engineer(s) instructing the training session.

7. Appendix 1: Level III/IV Substructure Inspection Form



**LEVEL III / IV
SUBSTRUCTURE INSPECTION SUMMARY FORM**

Owners are responsible for submitting completed summary form to
rpfeedback@caodc.ca

Level III Inspection

Level IV Inspection

Date: _____

Company: _____

Rig #: _____

Location: _____

Substructure Manufacturer: _____

Model Number: _____

Date of Manufacture: _____

Manufacturer's Drawing Available for Use in Inspection: Yes: No:

Historical Inspection Reports Available: Yes: No:

Manufacturer's Rating: _____

Substructure Serial #: _____

Substructure Type: _____

Substructure Position: _____

Substructure Nameplate Yes: No:

% Major Damage / Defects: _____

% Minor Damage / Defects: _____

Comments: _____

(PLEASE WRITE LEGIBLY)

Inspection Company: _____

Inspector Name: _____

Engineering Company: _____

Professional Engineer Name: _____

Professional Engineer Signature and Date: _____

LEVEL III / IV SUBSTRUCTURE INSPECTION CHECKLIST

Items that do not need attention should be checked to indicate that the item was inspected. Items that are not applicable should be marked in the box as "NA" (not applicable). Items that are warped, worn, damaged, cracked welds, rusted, bent, in need of repair or replacement, or otherwise in need of further attention, mark an "X" in the box and provide comments on the inspected items.

✓	OK	X1	Major - Requires immediate attention (Provide comments regarding inspected items.)
NA	Not applicable	X2	Major - Requires attention next move
U	Unable to access	X3	Minor - Requires attention next maintenance
M	Missing	X4	Minor - Requires attention prior to the next Category III inspection

PURPOSE & SCOPE OF INSPECTION: This report form and inspection procedure was developed as a guide for making and reporting field inspection in a thorough and uniform manner. The procedure is intended for use by operating personnel (or a designated representative) to the extent that its use satisfies conditions for which an inspection is intended. More detailed and critical inspections may be scheduled periodically or ordered to supplement a program of these inspections; if masts are used in the upper range of their load limits, or if structures may have been subjected to critical conditions which could affect safe performance. This form is provided strictly as a guide, and the CAODC accepts no liability whatsoever for its use or scope.

MARKING DAMAGE: At the time of inspection, damaged sections or equipment must be clearly and visibly marked so that needed repairs may be made. A bright, contrasting spray paint is suggested for this. When repairs are made, the visible markings should be removed by painting over them. It is also necessary for the inspector to write "None" when no damage markings are needed, as this is the indication that the item has passed inspection. It is recommended that inspection be made with assistance of manufacturer's assembly drawing and operating instructions. For items not accessible or that do not apply, draw a line through the item pertaining to the component.

1.0 Shoes, Pedestals:

<input type="checkbox"/>	Pin Connections:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Bolt Connections:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Bolt Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins/Bolts:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Safety Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Support Beams:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A

2.0 Floor Area:

<input type="checkbox"/>	Floor Plates:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Handrails & Toe Boards:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Handrail Connections:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Setback Beams:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Setback Beam Supports:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Setback Material:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Floor Bracing:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A

3.0 Sub-Spreaders and Rotary Beams:

<input type="checkbox"/>	Rotary Beams:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Spreaders:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin Connections:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Lugs:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Rotary Beam Supports:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A

4.0 Deadline Anchor Mounting:

<input type="checkbox"/>	Supports:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Bolts:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Flooring:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Breakover Assembly:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A

5.0 Spreaders (Back Panel Trusses)

<input type="checkbox"/>	Beams Straight:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Cross Braces:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin/Bolt Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin/Bolts:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Safety Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pull Back Posts:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Drawworks Tiedowns:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	BOP Anchor Lugs:	_____	<input type="checkbox"/>	N/A

<input type="checkbox"/>	Lugs:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Beams Straight:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Cross Braces:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin/Bolt Holes:	_____	<input type="checkbox"/>	N/A

6.0 Engine Foundation

<input type="checkbox"/>	Support Beams:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Cross Braces:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin/Bolt Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins/Bolts:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Safety Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pad-eyes:	_____	<input type="checkbox"/>	N/A

7.0 Engine Foundation Spreaders:

<input type="checkbox"/>	Beams:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Cross Braces:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins / Bolt Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins / Bolts:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Safety Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A

8.0 BOP Trolley Beams:

<input type="checkbox"/>	Beams:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Safety Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A

9.0 Raising Equipment:

<input type="checkbox"/>	Pin Connections:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Wirelines:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Sheaves:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Bearings:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Seals:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Grease Fittings:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Hydraulic Winches:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Hydraulic Cylinders:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Hydraulic Hoses:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Cylinder Hinge:	_____	<input type="checkbox"/>	N/A

10.0 Stairs/Landings/Flooring/Handrails:

<input type="checkbox"/>	Welds:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pin/Bolt Holes:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Pins/Bolts:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Floor Plating:	_____	<input type="checkbox"/>	N/A
<input type="checkbox"/>	Stair Tread Spacing:	_____	<input type="checkbox"/>	N/A

<input type="checkbox"/>	Handrails: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Handrail Sockets: _____	<input type="checkbox"/> N/A

12.0 Skidding/Walking Equipment

<input type="checkbox"/>	Lugs: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Pins: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Beam Clamps: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Cylinders: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Rollers: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Feet: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Jacks: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Jacking Motors: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Jacking Rack: _____	<input type="checkbox"/> N/A

13.0 Integrated BOP Handler

<input type="checkbox"/>	Lugs: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Pins: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Beams: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Winches/Hydraulic Cylinders: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Hydraulic Hoses: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Grease Fittings: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Wireline: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Sheaves: _____	<input type="checkbox"/> N/A
<input type="checkbox"/>	Welds: _____	<input type="checkbox"/> N/A

14.0 Corrosion (refer to Section 7.2):

15.0 Summary:

Number of Major Damage / Defects: _____ % of Major Damage / Defects: _____

Number of Minor Damage / Defects: _____ % of Minor Damage / Defects: _____

Total Number of Minor Damage / Defects: _____

16.0 Comments, Drawings, and/or Pictures:
