

Report ref N° REP1836



Exam Date 19/02/2018

Item ref N° 8394

Report Date 19/02/2018

Thorough Examination Report

Pressure Systems Safety Regulations 2000

Owner/User: Mr M Reed

Responsible Person: As above

Address: Ivy Cottage, Alverstone Road, Sandown, Isle of Wight, PO36 0NZ

Location: As above

Is the system subject to a regulation 9 postponement? No

Is the system subject to a hire agreement? No

System Details: Aveling & Porter Road Roller
Engine N° 8394 Build date 1914

Boiler Details: Aveling & Porter Locomotive Type Boiler
Boiler N° Not ascertained at this examination Build date 1914

Safe Working Pressure: 0 psi

Date of last hydraulic test: 11/05/1992

Test pressure applied: 180 psi

Date of completion of 10 year examination: 1992

Written scheme of examination reference number: N/A

Are any modifications required to the written scheme of examination?
scheme to be issued before the engine enters service New written

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Extent of examination: Thorough internal and external examination as far as accessible

Parts inaccessible: Internally remote from openings. Externally in way of engine parts

Last exposure of these parts: Front section of lagging removed at this examination. Rear section still in place

External condition: General corrosion and pitting to an estimated depth of 0.5 to 1mm in places. Grooving round the crown stay nuts to an estimated depth of 2 to 3mm. The tube ends in the smokebox are thinning. The front tube plate rivet heads are wasted by an estimated 10 to 40% in places

Internal condition: There is scale and debris up to the first row of stays in places round the foundation ring. General corrosion and pitting to an estimated depth of 1 to 2mm in places.

Thickness readings: Barrel 8.5 to 10mm
Firebox sides 8 to 9 mm
Firebox crown 4 to 7mm
Firebox tube plate 14mm
Front tube plate 10 to 11mm
Throat plate 9 to 11mm

Condition of fittings and protective devices: All fittings and protective devices will require removal and refurbishment

Any repairs required: New firebox required and as below

Other observations: As discussed on site the boiler is not suitable for service. It will require a new firebox. At this time we would also recommend that the front tube plate is replaced as it is getting towards the end of its life and the rivet heads are badly wasted in places.

Examination carried out by:
Mr P Hawkins MSOE MBES


Signature