

SITE SURVEY REPORT

Pump Maintenance

Prepared for	Derwent Hotels Ltd
Date	27 Sep 2026
Site	Derwent Street Hotel, Derby
Prepared by	C. Nwosu

FORM

Pump Maintenance**1. Record details and scope**

Project	Derwent Street Hotel, Derby: heating pump service (completed example)
Site or premises address	Derwent Street Hotel, 30 Derwent Street, Derby
Client or organisation	Derwent Hotels Ltd
Record date	27 Sep 2026
Person completing the record	C. Nwosu

For competent maintainers. This is not a pressure test certificate, hazardous-area approval or permission to open an unisolated system.

HSE advises competent maintenance, manufacturer instructions and safe isolation. Use a procedure suitable for the pump and fluid handled.

2. Equipment and work

Pump asset ID and location	P-LTHW-2, heating circuit pump (standby), basement plant room
Manufacturer, model and serial number	End-suction close-coupled pump, 4 kW. Serial number on the asset label, recorded in the plant register.
Maintenance procedure and revision	Pump maintenance procedure PM-PMP-03 rev 4
Technician and competence reference	C. Nwosu, mechanical maintenance technician, Trent Mechanical Ltd, card TM-0457
Planned work and exclusions	Six-monthly service: mountings, coupling, seal, bearings, strainer, run test and readings. Excludes motor rewind and pump overhaul.
Safe isolation or permit reference	Isolated at MCC starter, locked off tag TM-L-07. Suction and discharge valves closed for strainer clean. Permit PTW-DSH-0927.

3. Duty and conditions

Fluid, hazards and safety data reference	Low temperature hot water with inhibitor, about 70 °C. Hot surfaces and scalding risk. Inhibitor data sheet SDS-INH-02.
Duty point and operating range reference	Design duty on pump schedule PS-01, sheet 2
Run hours and duty or standby role	About 1,950 hours on this pump. Standby to P-LTHW-1, changed over weekly by the BMS.

Reported vibration, noise, leakage or loss of performance

Engineer noticed rust staining on the casing in August. No noise or loss of heat reported.

4. Mechanical checks

Mountings and coupling condition checked	Acceptable
Seals and visible leakage assessed	Action needed
Action, limitation or reason not applicable	Slight weep at the mechanical seal, about one drop a minute when running. Casing has surface rust and dried deposits below the seal.
Bearings and lubrication checked to procedure	Acceptable
Suction and discharge connections and strainers checked	Action needed
Action, limitation or reason not applicable	Suction strainer about half blocked with scale and debris. Cleaned and refitted with a new gasket. Discharge valve stiff, exercised and now free.
Guards restored and rotation or function verified safely	Acceptable

Measured value 1: Motor current, phase L1 to L3, on duty

Measurement point and parameter	Motor current, phase L1 to L3, on duty
Actual value and unit	6.9 A, 7.0 A, 6.9 A
Acceptance range and source	Below full load 8.1 A on motor plate
Instrument ID and calibration reference	Clamp meter CM-11, cal. 2026-03
Assessment	Within criterion

Measured value 2: Differential pressure across pump after strainer clean

Measurement point and parameter	Differential pressure across pump after strainer clean
Actual value and unit	1.6 bar
Acceptance range and source	1.4 to 1.8 bar, commissioning sheet PS-01
Instrument ID and calibration reference	Test gauge TG-03, cal. 2026-05
Assessment	Within criterion

Measured value 3: Bearing housing temperature, drive end, after 30 minutes

Measurement point and parameter	Bearing housing temperature, drive end, after 30 minutes
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Actual value and unit	48 °C
Acceptance range and source	Manufacturer guidance in PM-PMP-03 appendix B
Instrument ID and calibration reference	IR thermometer IR-06
Assessment	Within criterion

Measured value 4: Seal leakage rate

Measurement point and parameter	Seal leakage rate
Actual value and unit	About 1 drop per minute
Acceptance range and source	No visible leakage, PM-PMP-03
Assessment	Outside criterion
Response to exception	Seal replacement booked, job TM-26-1880. Drip tray placed under the pump and duty kept on P-LTHW-1 until repaired.

5. Work and handback

Work performed and parts used	Strainer cleaned, new strainer gasket fitted. Discharge valve exercised. Casing wire brushed below the seal so leakage can be seen.
Post-work tests and evidence	Run on duty for 30 minutes. Rotation correct, no unusual noise or vibration felt. Readings above.
Equipment handback	Restricted use
Restrictions, isolation and person informed	P-LTHW-2 left as standby only, BMS changeover suspended until the seal is replaced. Duty engineer A. Goodwin told at 13:20.

Condition and work evidence photos



6. Actions and review

Are further actions required? Yes

Further action 1: Replace mechanical seal on P-LTHW-2. Job TM-26-1880.

Action and evidence reference Replace mechanical seal on P-LTHW-2. Job TM-26-1880.

Person responsible C. Nwosu, Trent Mechanical Ltd

Target date 10 Oct 2026

Action status Open

Further action 2: Suspend weekly BMS duty changeover to P-LTHW-2 until the seal is replaced.

Action and evidence reference Suspend weekly BMS duty changeover to P-LTHW-2 until the seal is replaced.

Person responsible A. Goodwin, hotel duty engineer

Target date 27 Sep 2026

Action status Completed

Completion evidence Changeover disabled on the BMS at 13:30, screenshot on job TM-26-1880.

Outstanding limitations and information to pass on Seal weep remains until job TM-26-1880. Pump internals not opened.

Record status Further work needed

Reviewed by A. Goodwin, hotel duty engineer

Review date 29 Sep 2026

Author signature

C. NWOSU

Signing records the information entered. It does not itself certify legal compliance, remove a limitation or authorise unsafe work.