Hydrotek Engineering Co.

Technical Services Division

PUMP OVERHAUL & TEST REPORT

Job / WO No: **HY-TSD-TR-2026-0635**	Date: **24/09/2026**	Result: **ACCEPTED**

1. EQUIPMENT DETAILS

Project Details	Kabd Water Treatment Plant - Pump & Motor Repair overhauling (M/s. Contractor Co.)		
Tag / Equipment ID	**FHE 50-250/250**	**Location**	Kabd Water Treatment Plant
Equipment Name	**Horizontal Split-Case booster pump (Horizontal booster)** (Horizontal booster)		
Motor Specs	**22 kW** | **415 V** | **36 A** | 2900 RPM RPM		
Pump Specs	Model: **LOWARA FHE 50-250/250** | Flow: **85 m³/hr** | Head: **32 m m**		
Booster Specs			

2. 1. ELECTRICAL & STATOR INSULATION TEST

Test Parameter	Measured Value	Result
Stator Condition / Winding Status	**Bearings Replaced & Tested OK**	PASS
Winding Resistance (U1-U2, V1-V2, W1-W2 in Ohms)	U1–U2: **0.848 Ω** | V1–V2: **0.832 Ω** | W1–W2: **0.840 Ω**	PASS
Insulation Resistance (500V DC) – Phase to Ground	U–G: **470.81 MΩ** | V–G: **480.05 MΩ** | W–G: **466.75 MΩ**	PASS
Insulation Resistance (500V DC) – Phase to Phase	U–V: **445.66 MΩ** | V–W: **452.54 MΩ** | W–U: **436.15 MΩ**	PASS

3. 2. MECHANICAL SPECIFICATIONS & RENEWALS

Component Checked	Replacement Details / Part No.	Result
Drive End (DE) Bearing Fitted	Part No: **6309 2Z/C3** • Brand: SKF (Replaced New)	PASS
Non-Drive End (NDE) Bearing Fitted	Part No: **6308 2Z/C3** • Brand: SKF (Replaced New)	PASS
Mechanical Seal / Seal Spec	Cartridge Balanced Mechanical Seal (EPDM) • Static Leak Test: PASS	PASS

4. 3. HYDRAULIC & HYDROSTATIC PRESSURE TESTING

Test Parameter	Measured Value / Verification	Result
Hydraulic Pressure Boost Head	Suction: **3.5 Bar** • Discharge: **14.5 Bar** • Head: **112 m** • Stages: **5**	PASS
Hydrostatic Pressure Hold Test	Hold Test: **22.0 Bar** • Duration: **30 mins** • Integrity: **PASS - Zero Leakage**	PASS
Pressure Control & Transducer	Cut-In: **Cut-in: 4.5 Bar Bar** • Cut-Out: **Cut-out: 7.0 Bar Bar**	PASS

5. 4. OPERATIONAL RUN TEST (NO-LOAD / FULL SYSTEM RUN)

Test Parameter	Measured Value	Result
Running Current (A)	L1: **37.9 A** | L2: **37.6 A** | L3: **37.9 A**	PASS
Bearing Temperature (°C)	DE: **48.5 °C** | NDE: **43.2 °C** (Normal)	PASS
Vibration (mm/s RMS)	DE: **1.55 mm/s** | NDE: **1.68 mm/s** (Smooth)	PASS
Rotation & Seal Check	Rotation: **Correct (CW)** | Seal Leakage: **Nil / None**	PASS

6. 5. SPECIALIZED WORKSHOP VERIFICATIONS

Test Name	Standard / Criteria	Measured / Inspection	Result
Painting Done	-	**OK**	PASS
Hydrostatic Pressure Shell Test	1.5x Design Pressure (15 mins)- using External Pressure Pump	**No leakage or drop observed**	PASS

7. SIGN-OFF & APPROVALS

PREPARED BY:	INSPECTED BY:	APPROVED BY:
ENG. JITHU THOMAS	**ASWATH KUMAR HOSDURG**	**ABU GEROGE**
Signature — Date: 24/09/2026	Signature — Date: 24/09/2026	Signature — Date: 24/09/2026