# Hydrotek Engineering Co.

## Technical Services Division

## EQUIPMENT OVERHAUL & TEST REPORT

| Job No: **HY-TSD-TR-2026-0570** | Date: **03/05/2026** | Overall Result: **PASS** |
|---|---|---|

### 1. EQUIPMENT DETAILS

| | | | |
|---|---|---|---|
| **Project Details** | Mushrif pumping station rehabilitation work | | |
| **Tag / Equipment ID** | **OCF 04** | **Location** | ML-1 |
| **Equipment Name** | Odur control extract fan motor | | |
| **Motor Specs** | **160 kW** \| **415 V** \| **261.9 A** | | |

### 2. ELECTRICAL & INSULATION CHECKS

| Test Parameter | Measured Value | Result |
|---|---|---|
| Motor Rewinding & Stator Check | **Rewinded & Tested OK** | PASS |
| Winding Resistance (Ohms) | U1–U2: **0.121 Ω** \| V1–V2: **0.119 Ω** \| W1–W2: **0.120 Ω** | PASS |
| Insulation Resistance (500V DC) – **Phase to Ground** | U–G: **433.72 MΩ** \| V–G: **442.18 MΩ** \| W–G: **419.28 MΩ** | PASS |
| Insulation Resistance (500V DC) – **Phase to Phase** | U–V: **462.86 MΩ** \| V–W: **465.94 MΩ** \| W–U: **458.02 MΩ** | PASS |

### 3. MECHANICAL SEAL & BEARING REPLACEMENT

| Component Checked | Replacement Details / Part No. | Result |
|---|---|---|
| Bearings – Drive End (DE) | Part No: **6316 C3** • Brand: **SKF (Explorer Series)** (Replaced New) | PASS |
| Bearings – Non-Drive End (NDE) | Part No: **6314 C3** • Brand: **SKF (Explorer Series)** (Replaced New) | PASS |
| Mechanical Seal & Leak Test | N/A (Fan Motor Drive) • Static Leak Test: N/A | PASS |

### 4. OPERATIONAL RUN TEST

| Test Parameter | Measured Value | Result |
|---|---|---|
| Running Current (A) | L1: **91.30 A** \| L2: **93.13 A** \| L3: **89.47 A** | PASS |
| Bearing Temperature (°C) | DE: **51.5 °C** \| NDE: **45.2 °C** (Normal) | PASS |
| Vibration (mm/s RMS) | DE: **2.00 mm/s** \| NDE: **2.10 mm/s** (Good) | PASS |
| Rotation & Seal Check | Rotation: **Correct (CW)** \| Seal Leakage: **Nil / None** | PASS |

### 5. SIGN-OFF & APPROVALS

| PREPARED BY: | INSPECTED BY: | APPROVED BY: |
|---|---|---|
| **ENG. JITHU THOMAS** | **ASWATH KUMAR HOSDURG** | **ABU GEROGE** |
| Signature Date: 03/05/2026 | Signature Date: 03/05/2026 | Signature Date: 03/05/2026 |