

## **MILL TEST CERTIFICATE**

Product: Steel Pipe Schedule 40 Size: 4-inch OD x 0.237" Wall Material: ASTM A53B Grade B Heat Number: QA-2026-5847 MANUFACTURER: Quality Steel Mills Batch Date: February 15, 2026 Quantity: 100 pieces (2500 kg total)

### **CHEMICAL COMPOSITION ANALYSIS:**

Carbon (C): 0.22% (Max 0.30%) Manganese (Mn): 0.89% (Max 1.35%) Phosphorus (P): 0.018% (Max 0.04%) Sulfur (S): 0.008% (Max 0.04%) Silicon (Si): 0.24% (Max 0.40%) Iron (Fe): Balance Result: PASS - All elements within specification

### **MECHANICAL PROPERTIES TEST:**

Tensile Strength: 405 MPa (Min 330 MPa) Yield Strength: 290 MPa (Min 240 MPa) Elongation: 31% (Min 25%) Hardness (HB): 125 (Max 160) Result: PASS - All properties within ASTM A53B specification

### **HYDROSTATIC TEST:**

Pressure: 5.0 MPa (3x yield strength) Duration: 5 seconds Result: PASS - No leakage detected

### **SURFACE INSPECTION:**

Result: PASS - Free from cracks, seams, and laps

### **DIMENSIONAL INSPECTION:**

**OD: 4.000" ± 0.062" ✓**

Wall: 0.237" ± 0.020" ✓ Length: 6000mm ± 5mm ✓

### **FINAL RESULT: APPROVED FOR SHIPMENT**

Tested by: Laboratory Technician - Karim Hassan Date: February 16, 2026 Authorized by: Quality Manager - Dr. Mohammad Ali This certificate confirms that the material has been tested and complies with all requirements of ASTM A53B specification.