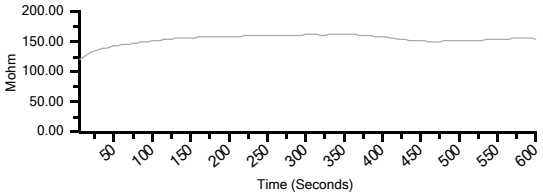
Report Title MCE Survey Report
Submitted By Kevin Maxwell
Create Date 05/15/25 9:18 AM
Asset Name SOUTH SERVICE WATER PUMP
Description

Date: 05/14/25 2:36 PM Dated Test Event

Test Date	05/14/25	05/14/25
Test Time	1:40 PM	2:36 PM
Test Location	Motor Leads	Junction Box
User	Administrator	Administrator
Tester Serial	5095	5095
MTAP ID		
	Baseline	
Frequency	1200	1200
Charge Time	600	600
Voltage	2500	2500
Motor Temp °C	26.6	26.6
Measured Mohm	1,506.39	143.77
Corrected Mohm	600.00	56.80
pF Ph 1 to Ground	47,500	53,100
ohm Ph 1 to 2	0.8232	0.8220
ohm Ph 2 to 3	0.8127	0.8126
ohm Ph 3 to 1	0.8177	0.8181
mH Ph 1 to 2	79.05	79.80
mH Ph 2 to 3	82.70	83.20
mH Ph 3 to 1	77.35	77.95
Average Inductance	79.70	80.30
% Res. Imbalance	0.65	0.61
% Ind. Imbalance	3.76	3.59

Date: 05/14/25 2:36 PM **Test:** Polarization Index Test



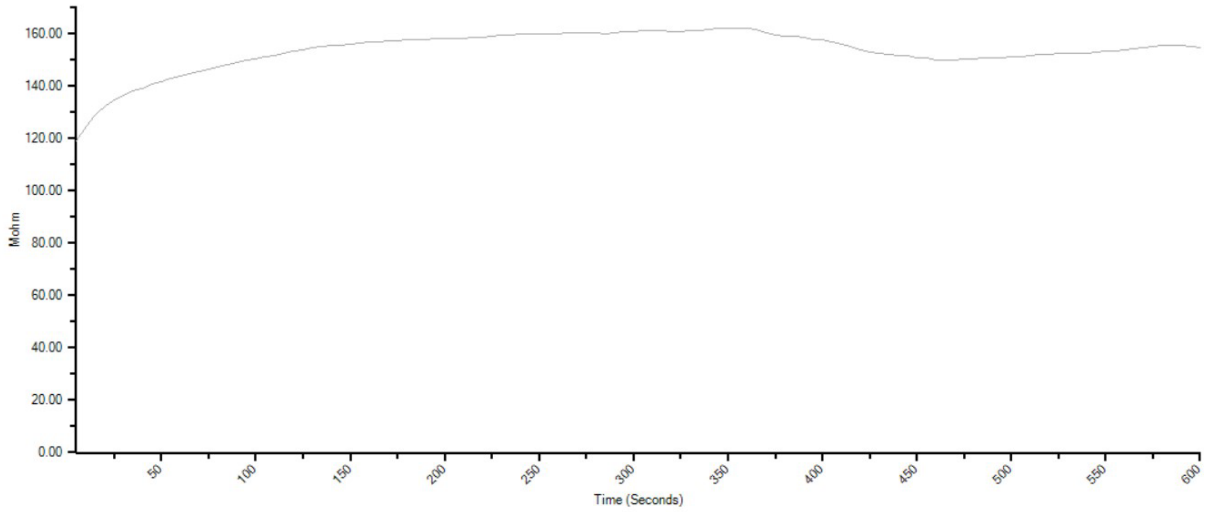
Date: 05/14/25 2:36 PM Dated Test Event

Test Date	05/14/25	05/14/25
Test Time	2:04 PM	2:36 PM
Test Location	Motor Leads	Junction Box
User	Administrator	Administrator
Tester Serial	5095	5095
MTAP ID		
	Baseline	
Voltage	2500	2500
Duration	600	600
D/A Ratio	1.409	1.055
Polar. Index	2.827	1.073

Remarks: The baseline test is our first test at the motor leads. All values from this test appears to be within IEEE standards. The second test is with the power leads connected to the motor circuit. Notice that the megohm value is much lower. The PI value and the D/A ration are also much lower. This is indication of an insulation issue with the power leads coming form the bucket to the motor. Please note that the RTG test was measured on A phase or leads marked 34. RTG was also measured on B and C phases and showed similar values; however the report only shows A phase megohm value. On the next page of this report are Polar Index graphs of each PI test. In conclusion, data from the second test with the power leads in the circuit, is indicative of insulation issues with the power leads such as degradation and or contamination. A good PI value is considered 2 and above. D/A ratio should be above 1.25. According to our first test with only the motor circuit, all values are acceptable which indicates that the motor itself appears to be in good condition.

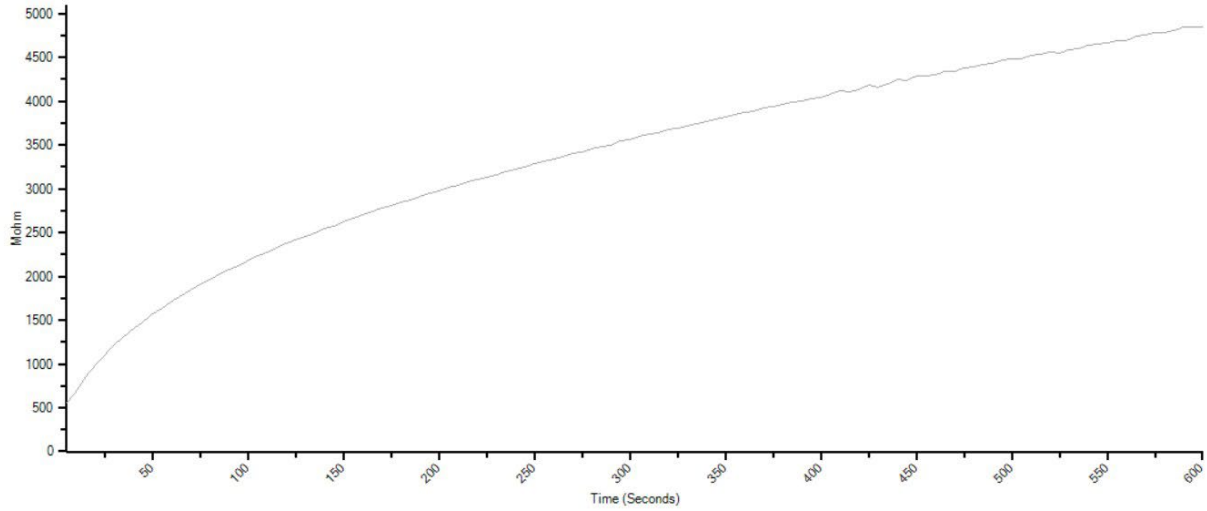
South Service Water Pump 2300v AC Motor

(Tested with Power Leads Connected to Motor Circuit)



South Service Water Pump 2300v AC Motor

(Tested at Motor Leads)



Tje top graph shows a flat index which is indicative of moisture and or insulation degradation.

The bottom graph shows a healthy motor circuit with a nice linear profile.