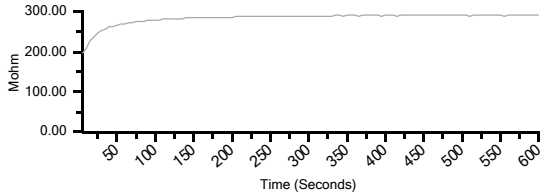
Report Title 2nd Quarter PdMA Motor Test Report
Submitted By Kevin Maxwell
Create Date 08/01/24 9:21 AM
Asset Name #1 Vacuum Pump
Description

Date: 07/23/24 10:44 AM Dated Test Event

Test Date	07/23/24
Test Time	10:44 AM
Test Location	Motor Leads
User	Administrator
Tester Serial	5095
MTAP ID	
	Baseline
Frequency	1200
Charge Time	600
Voltage	500
Motor Temp °C	27
Measured Mohm	269.67
Corrected Mohm	110.00
pF Ph 1 to Ground	94,100
ohm Ph 1 to 2	0.00360
ohm Ph 2 to 3	0.00361
ohm Ph 3 to 1	0.00362
mH Ph 1 to 2	1.735
mH Ph 2 to 3	2.080
mH Ph 3 to 1	2.020
Average Inductance	1.945
% Res. Imbalance	0.29
% Ind. Imbalance	10.80

Date: 07/23/24 10:44 AM **Test:** Polarization Index Test



Date: 07/23/24 10:44 AM Dated Test Event

Test Date	07/23/24
Test Time	10:44 AM
Test Location	Motor Leads
User	Administrator
Tester Serial	5095
MTAP ID	
	Baseline
Voltage	500
Duration	600
D/A Ratio	1.069
Polar. Index	1.074

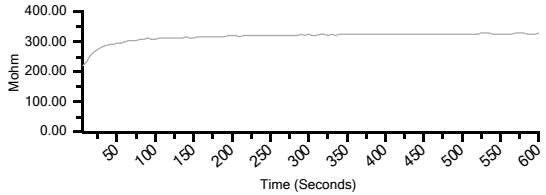
Remarks: This motor has been swapped since last year's test, therefore this is baseline data. Data suggests internal moisture in stator. Flat PI data is good indication of this. Will monitor this closely.

Report Title 2nd Quarter PdMA Motor Test Report
Submitted By Kevin Maxwell
Create Date 08/01/24 9:24 AM
Asset Name #2 Vacuum Pump
Description

Date: 07/23/24 11:17 AMDated Test Event

Test Date	08/01/20	08/06/22	07/17/23	07/23/24
Test Time	9:25 AM	10:23 AM	12:58 PM	11:17 AM
Test Location	ocal Disconnect - L	Not Assigned	Motor Leads	Motor Leads
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Frequency	1200	1200	1200	1200
Charge Time	600	600	600	600
Voltage	500	1000	500	500
Motor Temp °C	24	49	32	27
Measured Mohm	6,235.60	374.55	370.61	298.56
Corrected Mohm	2,100.00	700.00	213.00	121.00
pF Ph 1 to Ground	93.400	94.800	93.300	87.700
ohm Ph 1 to 2	0.0254	0.0282	0.0265	0.00312
ohm Ph 2 to 3	0.0254	0.0281	0.0264	0.00308
ohm Ph 3 to 1	0.0254	0.0281	0.0263	0.00309
mH Ph 1 to 2	1.625	1.695	1.540	1.660
mH Ph 2 to 3	1.365	1.420	1.385	1.480
mH Ph 3 to 1	1.600	1.525	1.665	1.410
Average Inductance	1.530	1.545	1.530	1.520
% Res. Imbalance	0.00	0.24	0.38	0.84
% Ind. Imbalance	10.78	9.59	9.48	9.45

Date: 07/23/24 11:17 AM Test: Polarization Index Test



Date: 07/23/24 11:17 AMDated Test Event

Test Date	08/01/20	08/06/22	07/17/23	07/23/24
Test Time	9:25 AM	10:23 AM	12:58 PM	11:17 AM
Test Location	ocal Disconnect - Li	Not Assigned	Motor Leads	Motor Leads
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Voltage	500	1000	500	500
Duration	600	600	600	600
D/A Ratio	1.383	1.080	1.060	1.069
Polar. Index	1.791	1.080	1.015	1.091

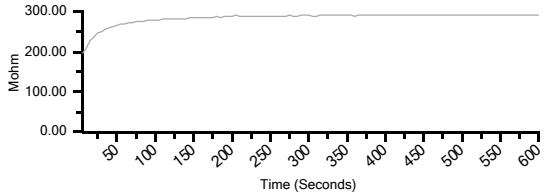
Remarks: Motor has showed a decrease in Mohm reading with each survey. This along with a flat low PI value indicates moisture in stator. All other values appear to be normal.

Report Title 2nd Quarter PdMA Motor Test Report
Submitted By Kevin Maxwell
Create Date 08/01/24 9:26 AM
Asset Name #3 Vacuum Pump
Description

Date: 07/23/24 1:03 PMDated Test Event

Test Date	08/01/20	08/06/22	07/17/23	07/23/24
Test Time	9:46 AM	10:40 AM	1:33 PM	1:03 PM
Test Location	ocal Disconnect - Lc	Not Assigned	verloads - Load Sic	Motor Leads
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Frequency	1200	1200	1200	1200
Charge Time	600	600	600	600
Voltage	500	1000	500	500
Motor Temp °C	24	49	32	28
Measured Mohm	10,303.65	291.99	295.46	268.69
Corrected Mohm	3,400.00	540.00	170.00	117.00
pF Ph 1 to Ground	88.000	107.800	98.600	87.400
ohm Ph 1 to 2	0.0343	0.0264	0.0249	0.00286
ohm Ph 2 to 3	0.0344	0.0262	0.0247	0.00293
ohm Ph 3 to 1	0.0310	0.0262	0.0247	0.00292
mH Ph 1 to 2	3.075	1.830	1.610	1.975
mH Ph 2 to 3	3.090	2.015	1.930	2.005
mH Ph 3 to 1	2.580	1.585	2.040	1.585
Average Inductance	2.915	1.840	1.860	1.855
% Res. Imbalance	6.72	0.51	0.54	0.73
% Ind. Imbalance	11.49	14.01	13.44	14.56

Date: 07/23/24 1:03 PM Test: Polarization Index Test



Date: 07/23/24 1:03 PMDated Test Event

Test Date	08/01/20	08/06/22	07/17/23	07/23/24
Test Time	9:46 AM	10:40 AM	1:33 PM	1:03 PM
Test Location	ocal Disconnect - Lc	Not Assigned	verloads - Load Sid	Motor Leads
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Voltage	500	1000	500	500
Duration	600	600	600	600
D/A Ratio	1.459	1.079	1.043	1.073
Polar. Index	2.360	1.027	1.007	1.081

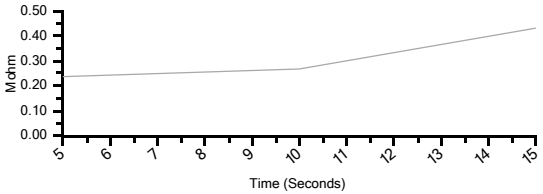
Remarks: Mohm readings have decreased with each survey. PI data is also low. Motor likely has internal moisture. Note that all three vac pump motors are showing low Mohm values and trending downward. This motor also appears to have slightly high inductive imbalance. This motor may need to swapped out in the next few months.

Report Title 2nd Quarter PdMA Motor Test Report
Submitted By Kevin Maxwell
Create Date 08/01/24 9:16 AM
Asset Name Dry Zone Circ. Fan 0883
Description

Date: 07/23/24 8:59 AMDated Test Event

Test Date	11/21/22	11/21/22	07/17/23	07/23/24
Test Time	1:06 PM	3:18 PM	11:01 AM	8:59 AM
Test Location	Motor Leads	verloads - Load Sic	Motor Leads	Motor Leads
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Frequency	1200	1200	1200	1200
Charge Time	600	600	600	600
Voltage	2500	2500	2500	2500
Motor Temp °C	14	11	28	24
Measured Mohm	25,371.81	19,755.24	633.88	0.00
Corrected Mohm	4,200.00	2,600.00	276.00	N/C
pF Ph 1 to Ground	96.700	119.900	124.500	216.000
ohm Ph 1 to 2	0.1808	0.2176	0.1911	0.0223
ohm Ph 2 to 3	0.1807	0.2178	0.1908	0.0222
ohm Ph 3 to 1	0.1808	0.2177	0.1909	0.0222
mH Ph 1 to 2	9.075	9.145	9.140	9.125
mH Ph 2 to 3	9.100	9.115	9.130	9.115
mH Ph 3 to 1	9.075	9.110	9.140	9.110
Average Inductance	9.085	9.125	9.135	9.115
% Res. Imbalance	0.04	0.05	0.09	0.30
% Ind. Imbalance	0.18	0.24	0.07	0.09

Date: 07/23/24 8:59 AM Test: Polarization Index Test



Date: 07/23/24 8:59 AMDated Test Event

Test Date	11/21/22	11/21/22	07/17/23	07/23/24
Test Time	1:06 PM	3:18 PM	11:01 AM	8:59 AM
Test Location	Not Assigned	Not Assigned	Motor Leads	Motor Leads
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Voltage	2500	2500	2500	2500
Duration	600	600	600	15
D/A Ratio	1.618	1.721	1.224	N/C
Polar. Index	6.868	6.276	2.679	N/C

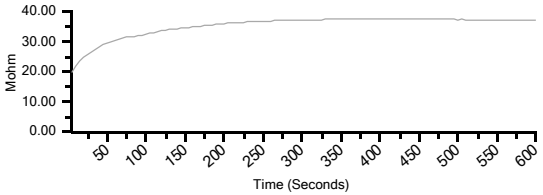
Remarks: The stator was megging very close to zero during our test and the PI test kicked out from excessive current leakage. Unfortunately, It had rained for a couple days before test and motor was down during this time allowing moisture to enter the stator. All other values look acceptable. Motor needs heaters installed on windings to help prevent this issue.

Report Title 2nd Quarter PdMA Motor Test Report
Submitted By Kevin Maxwell
Create Date 08/01/24 9:19 AM
Asset Name Wet Zone Circ. Fan
Description

Date: 03/03/24 9:30 AMDated Test Event

Test Date	07/23/24
Test Time	9:43 AM
Test Location	Motor Leads
User	Administrator
Tester Serial	5095
MTAP ID	
	Baseline
Frequency	1200
Charge Time	600
Voltage	2500
Motor Temp °C	24
Measured Mohm	30.26
Corrected Mohm	10.00
pF Ph 1 to Ground	180,900
ohm Ph 1 to 2	0.0207
ohm Ph 2 to 3	0.0206
ohm Ph 3 to 1	0.0207
mH Ph 1 to 2	27.92
mH Ph 2 to 3	23.48
mH Ph 3 to 1	25.16
Average Inductance	25.52
% Res. Imbalance	0.32
% Ind. Imbalance	9.40

Date: 07/23/24 9:43 AM Test: Polarization Index Test



Date: 03/03/24 9:30 AMDated Test Event

Test Date	07/23/24
Test Time	9:43 AM
Test Location	Motor Leads
User	Administrator
Tester Serial	5095
MTAP ID	
	Baseline
Voltage	2500
Duration	600
D/A Ratio	1.140
Polar. Index	1.226

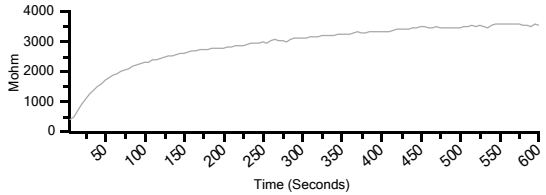
Remarks: This is new baseline data a recently installed motor. PI test looks ok considering stator had low meg value during testing. Motor need heaters to help keep moisture out of stator. Continue to build trend and monitor.

Report Title 2nd Quarter PdMA Motor Test Report
Submitted By Kevin Maxwell
Create Date 08/01/24 9:28 AM
Asset Name Low Vacuum pump fan
Description

Date: 07/23/24 1:27 PMDated Test Event

Test Date	08/01/20	08/06/22	07/17/23	07/23/24
Test Time	10:18 AM	9:41 AM	11:39 AM	1:27 PM
Test Location	ocal Disconnect - Lc	Not Assigned	verloads - Load Sid	l Disconnect - Load
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Frequency	1200	1200	1200	1200
Charge Time	600	600	600	600
Voltage	500	1000	500	500
Motor Temp °C	24	30	29	29
Measured Mohm	787.84	973.72	1,315.65	1,859.61
Corrected Mohm	260.00	487.00	610.00	870.00
pF Ph 1 to Ground	40.400	38.800	39.800	36.500
ohm Ph 1 to 2	0.0578	0.0604	0.0580	0.00682
ohm Ph 2 to 3	0.0579	0.0606	0.0581	0.00678
ohm Ph 3 to 1	0.0577	0.0603	0.0579	0.00677
mH Ph 1 to 2	3.210	3.260	3.125	2.945
mH Ph 2 to 3	2.700	2.875	3.225	3.285
mH Ph 3 to 1	3.020	2.795	2.665	2.710
Average Inductance	2.975	2.975	3.005	2.980
% Res. Imbalance	0.17	0.28	0.17	0.44
% Ind. Imbalance	9.29	9.52	11.31	10.23

Date: 07/23/24 1:27 PM Test: Polarization Index Test



Date: 07/23/24 1:27 PMDated Test Event

Test Date	08/01/20	08/06/22	07/17/23	07/23/24
Test Time	10:18 AM	9:41 AM	11:39 AM	1:27 PM
Test Location	ocal Disconnect - Lc	Not Assigned	verloads - Load Sid	l Disconnect - Load
User	Administrator	Administrator	Administrator	Administrator
Tester Serial	5095	5095	5095	5095
MTAP ID				
	Baseline			
Voltage	500	1000	500	500
Duration	600	600	600	600
D/A Ratio	1.209	1.353	1.420	1.502
Polar. Index	1.112	1.863	2.722	1.907

Remarks: All values look to be acceptable. Inductive imbalance has lowered some. This may have to do with rotor position during testing. No pressing issues to note at this time.