



Jonesboro, AR 2024 MCE Survey Report

Report Title2024 Frito-Lay MCE Survey ReportSubmitted ByKevin MaxwellCreate Date03/07/25 1:37 PMAsset Name#1 Air CompressorDescription



Date: 03/05/25	9:35 AMDated 7	lest Event	Date: 03/0	5/25 9:35 AM T	Fest: Polarization Index Test
Test Date	03/05/25		300000		
Test Time	9:35 AM		동 150000 -		
Test Location	Starter - Load Side		≦ 100000 -		
User	Administrator				
Tester Serial	5095		\$	10 19 20 29 30	30 42 42 42 42 42 44 44 44 44 44 44 44 44
MTAP ID				Time (Sec	onds)
	Baseline				
Frequency	1200				
Charge Time	600				
Voltage	500				
Motor Temp °C	25				
Measured Mohm	58,915.52				
Corrected Mohm	20,800.00		Data: 03/0	5/25 0.35 AME	Dated Test Event
pF Ph 1 to Ground	26,600		Date: 03/0	5/25 7.55 ANIL	Jaleu Test Event
ohm Ph 1 to 2	0.01993				
ohm Ph 2 to 3	0.0201		Test Date	02/05/25	
ohm Ph 3 to 1	0.01998		Test Date	0.25 AM	
mH Ph 1 to 2	0.775		Test I postion	Starter Load Side	
mH Ph 2 to 3	0.795		llear	Administrator	
mH Ph 3 to 1	0.795		Tester Serial	5095	
Average Inductance	0.790		MTAP ID		
% Res. Imbalance	0.48			Baseline	
% Ind. Imbalance	1.69		Voltage	500	
	14075		Duration	600	
			D/A Ratio	1.380	

Report Title2024 Frito-Lay MCE Survey ReportSubmitted ByKevin MaxwellCreate Date03/07/25 1:39 PMAsset Name#2 Air CompressorDescription





Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:48 PM Asset Name #3 Air Compressor Description





Remarks: Baseline data look good except Polar Index value is just below the IEEE standard of 2. Continue to monitor as normal.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:49 PM Asset Name #4 Air Compressor Description



Date: 03/05/25	11:56 AMDated	Test Event	Date: 03/0	5/25 11:56 AM	Test: Polarization Index Test
Test Date	03/05/25		20000 -		
Test leastion	Starter Land Side		ਚ 10000 -	Y Y	
llear	Administrator		5000		
Tester Serial	Administrator		° 1,	<u>تىتىتى</u>	<u>, , , , , , , , , , , , , , , , , , , </u>
MTAD ID	CCUC		\$	10 13 20 23 30 1	23 42 42 42 42 42 42 42
MIAPID	Developer			Time (Seco	onds)
	Baseline				
Frequency	1200				
Charge Time	600				
Voltage	500				
Motor Temp °C	25				
Measured Mohm	10,828.63				
Corrected Mohm	3,800.00		Data: 02/0	5/25 11.56 AM	Datad Tast Event
pF Ph 1 to Ground	48,800		Date. 05/0	5/25 11.50 ANI	Dated Test Event
ohm Ph 1 to 2	0.00777				
ohm Ph 2 to 3	0.00762		TID	00/05/05	
ohm Ph 3 to 1	0.00778		Test Date	03/05/25	
mH Ph 1 to 2	1,115		Test Leasting	11:30 AM	
mH Ph 2 to 3	1.220		lloor	Administrator	
mH Ph 3 to 1	1 140		Tester Serial	5005	
Average Inductance	1.160		MTAP ID	3033	
% Res Imbalance	134			Baseline	
% Ind Imbalance	5 32		Voltage	500	
······································	0.02		Duration	600	
			D/A Decis	1 202	
			Dia Hatio	1.202	
			Polar. Index	1.578	

Remarks: Baseline data look good except Polar Index value is just below the IEEE standard of 2. Continue to monitor as normal.

Report Title2024 Frito-Lay MCE Survey ReportSubmitted ByKevin MaxwellCreate Date03/07/25 1:56 PMAsset Name#5 Air CompressorDescription



Date: 03/05/25	4:06 PMDated T	'est Event	Date: 03/0	5/25 4:06 PM 7	Fest: Polarization	n Index Test
Test Date	03/05/25		80000			~
Test Time	4:06 PM		€ 40000 -			
Test Location	Starter - Load Side		≥ 20000			
User	Administrator		20000			_
Tester Serial	5095		\$ \$	10 19 10 19 10		P
MTAP ID				Time (Sec	conds)	
	Baseline				,	
Frequency	1200					
Charge Time	600					
Voltage	500					
Motor Temp °C	33.3					
Measured Mohm	4.564.80					
Corrected Mohm	2,900.00		Data: 02/0	5/25 1.06 DMI	Data d Taat Errant	
pF Ph 1 to Ground	38,500		Date: 05/0	3/23 4:00 P MI	Jaled Test Event	
ohm Ph 1 to 2	0.00663					
ohm Ph 2 to 3	0.00660		TID	02/05/25	02/05/25	
ohm Ph 3 to 1	0.00658		Test Date	03/03/23	03/05/25	
mH Ph 1 to 2	0.835		Test I contine	Starter Load Side	States Load Side	
mH Ph 2 to 3	0.795		User	Administrator	Administrator	
mH Ph 3 to 1	0.735		Tester Serial	5095	5095	
Average Inductance	0.790		MTAP ID			
% Res. Imbalance	0.40		N PAGE 18			
% Ind. Imbalance	6.77		Voltage	500	500	
	- PDC2-2		Duration	15	600	
			D/A Ratio	N/C	2.177	

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:57 PM Asset Name #6 Air Compressor Description



Date: 03/06/25	8:37 AMDated T	est Event Date: 03/06/25 8:37 AM Test: Polarization Index Test
Test Date	03/06/25	
Test Time	8:37 AM	E 4000
Test Location	Starter - Load Side	
User	Administrator	
Tester Serial	5095	
MTAP ID		Time (Seconds)
	Baseline	
Frequency	1200	
Charge Time	600	
Voltage	500	
Motor Temp °C	22.7	
Measured Mohm	1,446,49	
Corrected Mohm	436.00	Data 02/06/25 9.27 AMDatad Test Event
pF Ph 1 to Ground	20,800	Date: 05/00/25 8:57 AMDated Test Event
ohm Ph 1 to 2	> 2000	
ohm Ph 2 to 3	> 2000	T D
ohm Ph 3 to 1	> 2000	Test Date 03/00/25
mH Ph 1 to 2	> 250	Test I postion States Load Side
mH Ph 2 to 3	> 250	Ilser Administrator
mH Ph 3 to 1	> 250	Tester Serial 5095
Average Inductance	N/C	MTAP ID
% Res. Imbalance	N/C	Baseline
% Ind. Imbalance	N/C	Voltage 500
		Duration 600
		D/A Ratio 1.658
		Polar Index 4 792

Remarks: Phase to phase resistance and phase to phase inductance is way off scale. This is a potential major issue and should be addressed asap. We recommend removing the power leads from the starters and installing lugs on each of the six power leads. Connect leads and retest. If values are still showing to be out of range, then it is recommended to disconnect the motor leads inside the junction box. Install lugs on each motor lead, connect leads as necessary, and retest. If values are still out of range, then it is highly recommended to remove the motor and send to the motor shop for tear down and further testing.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:49 PM Asset Name #1 Boiler Feed Water Pump Description





Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:51 PM Asset Name #2 Boiler Feed Water Pump Description





Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:52 PM Asset Name #3 Boiler Feed Water Pump Description





Remarks: Baseline data looks good except PI value is below the IEEE standard of 2. Continue to monitor as normal.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:55 PM Asset Name #1 Boiler Draft Fan Description



Date: 03/05/25	3:08 PMDated T	est Event	Date: 03/0	5/25 3:08 PM T	Sest: Polarization Index Test
Test Date	03/05/25		4000 -		
Test Time	3:08 PM		Ę 2000 -		
Test Location	Starter - Load Side		5 1000		
User	Administrator				
Tester Serial	5095			\$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$
MTAP ID			11	Time (Seco	nds)
	Baseline		11		
Frequency	1200				
Charge Time	600				
Voltage	500		11		
Motor Temp °C	27.7				
Measured Mohm	2,773.70				
Corrected Mohm	1,200.00		Data: 02/0	5/05 2.00 DMD	Date d Test Event
pF Ph 1 to Ground	42,800		Date: 05/0.	5/25 5:08 PMD	valed Test Event
ohm Ph 1 to 2	0.0332		11		
ohm Ph 2 to 3	0.0334			00/05/05	
ohm Ph 3 to 1	0.0331		Test Date	03/05/25	
mH Ph 1 to 2	3.285		Test leasting	States Load Side	
mH Ph 2 to 3	4.465		Test Location	Administrator	
mH Ph 3 to 1	3.540		Tester Serial	5095	
Average Inductance	3.765		MTAP ID	0000	
% Res. Imbalance	0.50			Baseline	
% Ind Imbalance	18.64		Voltage	500	
			Duration	600	
			D/A Ratio	1.154	
			Polar. Index	1.181	

Remarks: Baseline data shows a high amount of inductive imbalance which may indicate stator and or rotor issues. It is recommended to retest the motor at the motor leads in the motor junction box. Polar Index is also considered borderline low. Retest as time allows.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 1:53 PM Asset Name #2 Boiler Draft Fan Description





Remarks: Baseline data shows high resistive imbalance. It is highly recommended to retest the motor at the motor leads disconnected form the power leads to help determine root cause. Retest as soon as time allows.

Report Title2024 Frito-Lay MCE Survey ReportSubmitted ByKevin MaxwellCreate Date03/07/25 1:57 PMAsset NameBCP ClextralDescription



Date: 03/06/25	9:34 AMDated T	est Event	Date: 03	/06/25 9:34 AM '	Test: Polarization Index Test
Test Date	03/06/25		300000 250000	~~~~	
Test Time	9:34 AM		200000 - E 150000 -		
Test Location	Disconnect - Load		≥ 100000		
User	Administrator		50000 -		
Tester Serial	5095			\$ \$ \$ \$ \$ \$ \$ \$ \$	
MTAP ID				Time (Se	econds)
	Baseline			× ×	,
Frequency	1200				
Charge Time	600				
Voltage	500				
Motor Temp °C	20				
Measured Mohm	134,561.70				
Corrected Mohm	33,600.00		Data: 02	106/25 0.24 AMI	Datad Tast Evant
pF Ph 1 to Ground	79,500			/00/23 9.34 AMI	Dated Test Event
ohm Ph 1 to 2	0.00969				
ohm Ph 2 to 3	0.00962		Test Dev	02/06/25	1
ohm Ph 3 to 1	0.00966		Test Date	0.34 AM	
mH Ph 1 to 2	0.950		Test locati	Disconnect - Load	
mH Ph 2 to 3	0.855		User	Administrator	
mH Ph 3 to 1	0.990		Tester Ser	al 5095	
Average Inductance	0.930		MTAP ID		
% Res. Imbalance	0.38			Baseline	
% Ind. Imbalance	8.23		Voltage	500	
			Duration	600	
			D/A Ratio	1.660	
			Polar. Inde	x N/C	

Remarks: This is our baseline data. All values appear to be within IEEE standards expect for inductive imbalance. This is just out of spec and needs to be trended over time. PI shows to be N/C. This means value is above the limit of the tester. In other words, the stator is megging towards infinity. Continue to monitor as normal.

Report Title2024 Frito-Lay MCE Survey ReportSubmitted ByKevin MaxwellCreate Date03/07/25 2:42 PMAsset NamePC Oil Circ PumpDescriptionPC





Remarks: This is our baseline data. All values appear to be within IEEE standards expect for inductive imbalance. This is just out of spec and needs to be trended over time. Corrected Mohm, D/A ratio, and PI values show to be N/C. This means value is above the limit of the tester. In other words, the stator is megging towards infinity. Continue to monitor as normal.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 2:31 PM Asset Name TCP1 Mill Description





Remarks: Baseline data shows inductive imbalance to be somewhat high and Polar Index value is also below the IEEE standard of 2. Severity will be determined as trend data develops. Continue to monitor as normal.

Report Title2024 Frito-Lay MCE Survey ReportSubmitted ByKevin MaxwellCreate Date03/07/25 1:58 PMAsset NameTCP2 MillDescription



Jate: 03/06/25	IU: 18 AMDated	Date: U3/06/25 10:18 AM Test: Polarization Index Test
Test Date	03/06/25	
Test Time	10:18 AM	μ ²⁰⁰⁰ -
Test Location	Starter - Load Side	
User	Administrator	
Tester Serial	5095	
MTAP ID		Time (Seconds)
	Baseline	
Frequency	1200	
Charge Time	600	
Voltage	500	
Motor Temp °C	20	
Measured Mohm	1,456.65	
Corrected Mohm	364.00	Data: 02/06/25 10:18 AMDated Test Event
pF Ph 1 to Ground	56,700	Date. 05/00/25 10.18 AlviDateu Test Event
ohm Ph 1 to 2	0.0771	
ohm Ph 2 to 3	0.0768	T 02/08/25
ohm Ph 3 to 1	0.0770	Test Date 03/00/25
mH Ph 1 to 2	2.410	Test I me 10.10 AM
mH Ph 2 to 3	1.990	User Administrator
mH Ph 3 to 1	2.305	Tester Serial 5095
Average Inductance	2.235	MTAP ID
% Res. Imbalance	0.22	Baseline
% Ind. Imbalance	10.96	Voltage 500
		Duration 600
		D/A Ratio 1.389

Remarks: Baseline data shows inductive imbalance to be above IEEE standard of 8% and Polar Index value is also below the IEEE standard of 2. Severity will be determined as trend data develops. Continue to monitor as normal.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 2:42 PM Asset Name TCP3 Mill Description



Date: 03/06/25	11:04 AMDated	Test Event Date: 03/06/25 11:04 AM Test: Polarization Index Test
Test Date	03/06/25	500.00 –
Test Time	11:04 AM	Ę 300.00
Test Location	Starter - Load Side	₹ 200.00
User	Administrator	
Tester Serial	5095	
MTAP ID		Time (Seconds)
	Baseline	
Frequency	1200	
Charge Time	600	
Voltage	500	
Motor Temp °C	20	
Measured Mohm	374.47	
Corrected Mohm	93.60	Data: 02/06/25 11:04 AMDatad Test Front
pF Ph 1 to Ground	36,500	Date: 05/00/25 11:04 AMDated Test Event
ohm Ph 1 to 2	0.2591	
ohm Ph 2 to 3	0.2604	T . D
ohm Ph 3 to 1	0.2660	Test Date 03/06/25
mH Ph 1 to 2	5.860	Test Inne 11.04 Am
mH Ph 2 to 3	5.955	Ilear Administrator
mH Ph 3 to 1	4.970	Tester Serial 5095
Average Inductance	5.595	MTAP ID
% Res. Imbalance	1.59	Baseline
% Ind. Imbalance	11.17	Voltage 500
		Duration 600
		D/A Ratio
		Polar. Index 1.102

Remarks: Baseline data shows inductive imbalance to be above IEEE standard of 8% and Polar Index value is also below the IEEE standard of 2. Motor circuit may have excessive moisture and or contaminants. A low PI value below 1 is considered alarm level, however severity will be determined as trend data develops. Continue to monitor as normal.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 2:43 PM Asset Name AHU 1 Description



Date: 03/06/25	12:15 PMDated	Test Event Date: 03/06/25 12:15 PM Test: Polarization Index Test
Test Date	03/06/25	150000
Test Time	12:15 PM	₽ ¹⁰⁰⁰⁰⁰
Test Location	Starter - Load Side	Š 5000 −
User	Administrator	
Tester Serial	5095	
MTAP ID		Time (Seconds)
	Baseline	
Frequency	1200	
Charge Time	600	
Voltage	500	
Motor Temp °C	14.4	
Measured Mohm	32,315.32	
Corrected Mohm	5,500.00	Data 02/06/25 12:15 DMDatad Test Event
pF Ph 1 to Ground	25,400	Date: 05/00/25 12:15 PMDated Test Event
ohm Ph 1 to 2	0.0409	
ohm Ph 2 to 3	0.0409	T . D
ohm Ph 3 to 1	0.0409	Test Date 03/06/25
mH Ph 1 to 2	3.455	Test Inne 12:13 PM
mH Ph 2 to 3	3.930	Illear Administrator
mH Ph 3 to 1	3.485	Tester Serial 5095
Average Inductance	3.625	MTAP ID
% Res. Imbalance	0.00	Baseline
% Ind. Imbalance	8.46	Voltage 500
		Duration 600
		D/A Ratio 1.282
		Polar, Index 4,395

Remarks: This is our baseline data. All values appear to be within IEEE standards except for % of inductive imbalance which is slightly out of IEEE spec (8% for 480 volt AC motor). We need to build trend data to determine severity. Continue to monitor as normal.

Report Title2024 Frito-Lay MCE Survey ReportSubmitted ByKevin MaxwellCreate Date03/07/25 2:44 PMAsset NameAHU 2Description



Date: 03/06/25	12:36 PMDated '	Test Event	Date: 03/0	6/25 12:36 PM	Test: Polarization Index Test
Test Date	03/06/25		10000 8000 -		
Test Time	12:36 PM		토 6000 -		
Test Location	I Disconnect - Load		§ 4000 -		
User	Administrator		2000		
Tester Serial	5095		\$ 	10 19 10 19 10 1	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$
MTAP ID				Time (Seco	s k k s s s s
	Baseline				
Frequency	1200				
Charge Time	600				
Voltage	500				
Motor Temp °C	14.5				
Measured Mohm	5,863.16				
Corrected Mohm	1,000.00		Data: 02/0	6/25 12.26 DM	Dated Test Event
pF Ph 1 to Ground	25,800		Date. 03/0	0/23 12.30 F MI	Dated Test Event
ohm Ph 1 to 2	0.0404				
ohm Ph 2 to 3	0.0404		Test Dete	02/06/25	
ohm Ph 3 to 1	0.0404		Test Date	12:36 DM	
mH Ph 1 to 2	3.370		Test Location	Disconnect - Lond	
mH Ph 2 to 3	3.470		User	Administrator	
mH Ph 3 to 1	3.740		Tester Serial	5095	
Average Inductance	3.525		MTAP ID		
% Res. Imbalance	0.00			Baseline	
% Ind. Imbalance	6.05		Voltage	500	
	1313.007		Duration	600	
			D/A Ratio	1.272	
			Polar. Index	1,647	

Remarks: This is our baseline data. All values appear to be within IEEE standards except PI value is slightly below the standard of 2. Continue to monitor as normal.

Report Title 2024 Frito-Lay MCE Survey Report Submitted By Kevin Maxwell Create Date 03/07/25 2:44 PM Asset Name AHU 3 Description



Date: 03/06/25	12:56 PMDated	Test Event Date: 03/06/25 12:56 PM Test: Polarization Index Test	
Test Date	03/06/25	600.00 500.00	
Test Time	12:56 PM	€ 400.00 € 300.00	
Test Location	Disconnect - Load	₹ 200.00	
User	Administrator		
Tester Serial	5095		
MTAP ID		Time (Seconds)	
	Baseline		
Frequency	1200		
Charge Time	600		
Voltage	500		
Motor Temp °C	13		
Measured Mohm	497.83		
Corrected Mohm	76.60	Data 02/06/25 12:56 DM Datad Test Event	
pF Ph 1 to Ground	25,600	Date. 05/00/25 12.50 FiviDateu Test Event	
ohm Ph 1 to 2	0.0414		
ohm Ph 2 to 3	0.0414	T D	
ohm Ph 3 to 1	0.0414	Test Date 03/00/25	
mH Ph 1 to 2	5.065	Test I perting 12:30 PM	
mH Ph 2 to 3	4.180	Ilser Administrator	
mH Ph 3 to 1	4.435	Tester Serial 5095	
Average Inductance	4.560	MTAP ID	
% Res. Imbalance	0.00	Baseline	
% Ind. Imbalance	11.07	Voltage 500	
		Duration 600	
		D/A Ratio 0.872	
		Polar, Index	

Remarks: Baseline data shows inductive imbalance to be above the IEEE standard of 8%. This is minor compared to the low Polar Index value of .261. This is considered alarm level. The stator likely has excessive moisture and or other contaminants. Corrected Mohm value is low as well which is another indication of excessive **a** ternal moisture. It is recommended to retest the motor after the motor has been in operation for several hours. If PI is still low, then the stator is likely contaminated and should be considered for reconditioning to prevent unexpected winding failure.