Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Recondition Repair Report

FolderID: 97831
FormID: 9934701

FUTURE FUEL CHEMICAL
2800 GAP RD HWY 394 SO
BATESVILLE, AR 72501

Priorities Found: **1 - High** **13 - Good**

General

1.	Job Number	**97831**
2.	Report Date	
3.	Customer	

Name Plate Information

4.	Manufacturer	**RELIANCE**

5.	Model	**7324586-001-CK T1**
6.	Serial Number	
7.	Horsepower	**18.5 HP**
8.	KW	
9.	Volts	**460**
10.	Amps	
11.	RPM	
12.	Frame	**286TDZ**
13.	Enclosure	**EXP**
14.	Cycles	**60**

15.	Phase	**3**	
16.	Service Factor		
17.	Motor Mount Position		

Initial Inspection

18.	Number of Leads	**6**	P13

19.	Lead Length		
20.	Lead Size		
21.	Lead Condition	**(P) Pass**	
22.	Lead Markings	**T1-T-3 & T11-T13**	P51

23.	Lug Size, Condition, and Type	P67

Good

24.	Winding RTD's		
25.	Winding Rtd's Condition		
26.	Shaft Run Out		
27.	Does Shaft Turn Freely	**yes**	
28.	Does Shaft Have Visible Damage	**no**	P94

29.	Bearing Rtd's		
30.	Bearing Rtd's Condition		

31. Contamination P104

Yes. Saturated with oil.

32. Frame Condition **(P) Pass** P106

33. Fan Condition **(P) Pass** P109

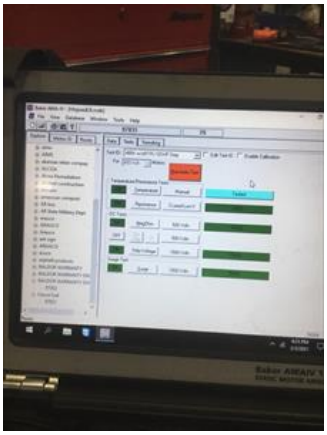
34. Broken or missing components P113

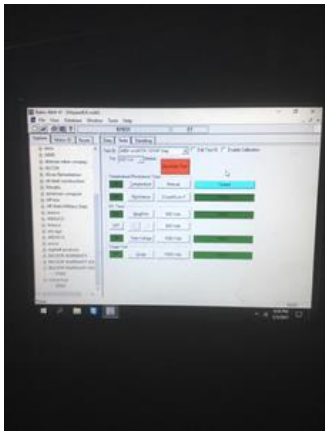
Fan cover cracked

Initial Electric Test

35. Resistance to Ground
36. Winding Resistance 1-2
37. Winding Resistance 2-3
38. Winding Resistance 1-3
39. Resistive Imbalance
40. Hi-Pot
41. Surge Test **(P) Pass** P58

First test is leads 11-12-13. 2nd test is leads 1-2-3





42.	Stator Condition	**good**	
43.	Failure Location		

Initial Rotor Inspection

44.	Rotor Type	**squirrel cage**	P4

45.	Air Gap <10% Variation		
46.	Number of Rotor Bars	**38**	
47.	Number of Broken Rotor Bars	**0**	
48.	Growler Test	**(P) Pass**	
49.	Rotor Condition	**(P) Pass**	

Mechanical Inspection

50.	Bearing Manufacture	**FAG**	P1

51.	Bearing DE Size	**6310 2Z/C3**	P15

52.	Bearing DE Type	**regular ball bearing**	
53.	DE Bearing Qty.	**1**	
54.	Bearing ODE Size	**6310 2Z**	P43

55.	Bearing ODE Type	**regular ball bearing**	P53

56.	ODE Bearing Qty.	**1**	
57.	Insulated Bearing	**no**	
58.	Lubrication Type	**grease**	
59.	Grease Condition	**(F) Fail**	
	Contaminated with oil		
60.	Bearing Retainers	**(Y) Yes**	

61.	Shaft Grounding Device	**(NA) Not Applicable**	
62.	DE Seal	**(Y) Yes**	P86

Worn lip seal.

63.	DE Seal Type/Size		
64.	ODE Seal	**(NA) Not Applicable**	
65.	ODE Seal Type/Size		

Root Cause of Failure

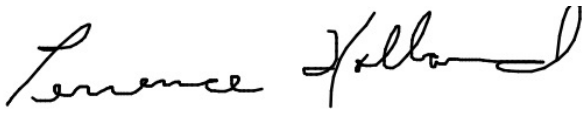
66.	Component Failure		
67.	Cause of Failure		P14

Stator saturated with oil

68. Comments

Stator windings were saturated with excessive amounts of oil. Recommend rewinding the stator.

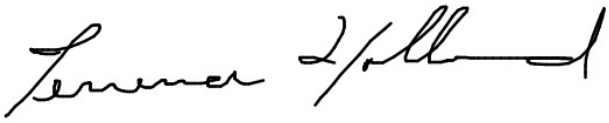
69. Service Technician **Terrence Holland**



Machine Fit Inspection Report

70.	Shaft Run Out		
71.	Initial Shaft Run Out		
72.	Final Shaft Run Out		
73.	DE Bearing Shaft Fit	**(P) Pass**	

	74.	DE Initial Shaft Bearing Fit Size 1	**1.969 "**
	75.	DE Initial Shaft Bearing Fit Size 2	**1.9689 "**
	76.	DE Initial Shaft Bearing Fit Size 3	**1.969 "**
	77.	DE Finial Shaft Bearing Fit Size 1	**"**
	78.	DE Finial Shaft Bearing Fit Size 2	**"**
	79.	DE Finial Shaft Bearing Fit Size 3	**"**
●	80.	ODE Bearing Shaft Fit	**(P) Pass**
	81.	ODE Initial Shaft Bearing Fit Size 1	**1.9688 "**
	82.	ODE Initial Shaft Bearing Fit Size 2	**1.9688 "**
	83.	ODE Initial Shaft Bearing Fit Size 3	**1.9688 "**
	84.	ODE Finial Shaft Bearing Fit Size 1	
	85.	ODE Finial Shaft Bearing Fit Size 2	
	86.	ODE Finial Shaft Bearing Fit Size 3	
	87.	DE Air Seal Shaft Fit	
	88.	DE Initial Air Seal Shaft Size	
	89.	DE Final Air Seal Shaft Size	
	90.	ODE Air Seal Shaft Fit	
	91.	ODE Initial Air Seal Shaft Size	
	92.	ODE Final Air Seal Shaft Size	
●	93.	DE Endbell Fit	**(P) Pass**
	94.	DE Initial Endbell Fit Size 1	**4.3314 "**
	95.	DE Initial Endbell Fit Size 2	**4.3312 "**
	96.	DE Initial Endbell Fit Size 3	**4.3314 "**
	97.	DE Final Endbell Fit Size 1	
	98.	DE Finial Endbell Fit Size 2	
	99.	DE Final Endbell Fit Size 3	
	100.	DE Endbell Fit Insulated	**(NA) Not Applicable**
	101.	DE Endbell Air Seal Fit	
	102.	Initial Endbell Air Seal Fit Size	
	103.	Finial Endbell Air Seal Fit Size	
●	104.	ODE Endbell Fit	**(P) Pass**
	105.	ODE Initial Endbell Fit Size 1	**4.3313 "**
	106.	ODE Initial Endbell Fit Size 2	**4.3313 "**
	107.	ODE Initial Endbell Fit Size 3	**4.3315 "**
	108.	ODE Final Endbell Fit Size 1	
	109.	ODE Final Endbell Fit Size 2	
	110.	ODE Final Endbell Fit Size 3	
	111.	ODE Endbell Fit Insulated	
	112.	ODE Endbell Air Seal Fit	
	113.	ODE Initial Endbell Seal Fit Size	
	114.	ODE Finial Endbell Seal Fit Size	
	115.	Foot Flatness	**(NA) Not Applicable**
	116.	Foot Condition	**(NA) Not Applicable**
●	117.	Flange Condition	**(P) Pass**
	118.	Service Technician	**Terrence Holland**



Balancing Report

119.	Balance Type
120.	Balance Operating Speed
121.	Start Left End
122.	Start Right End
123.	Balancing Specification
124.	Finish Left End
125.	Finish Right End
126.	Service Technician

Assembly and Final Test

127.	Meggar Testing Reading
128.	Surge Test
129.	Hi-Pot
130.	Winding Resistance 1-2
131.	Winding Resistance 2-3
132.	Winding Resistance 1-3
133.	Test Run Voltage Phase A
134.	Test Run Amps A
135.	Test Run Voltage Phase B
136.	Test Run Amps B
137.	Test Run Voltage Phase C
138.	Test Run Amps C
139.	DE Horizontal Vibration Reading
140.	DE Vertical Vibration Reading
141.	DE Axial Vibration Reading
142.	ODE Horizontal Vibration Reading
143.	ODE Vertical Vibration Reading
144.	ODE Axial Vibration Reading
145.	Ambient Temp at start of Test Run
146.	Temp at 5 minutes
147.	Temp at 10 minutes
148.	Temp at 15 minutes
149.	Temp at 20 minutes
150.	Temp at 25 minutes
151.	Temp at 30 minutes
152.	Temp at 35 minutes
153.	Temp at 40 minutes
154.	Temp at 45 minutes
155.	Temp at 50 minutes
156.	Temp at 55 minutes
157.	Temp at 60 minutes
158.	Motor Paint

159. Service Technician