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

Submersible Pump Repair Report

FolderID: 99576
FormID: 13198977

Sage V Foods
5901 SLOAN DRIVE
LITTLE ROCK, AR 72206

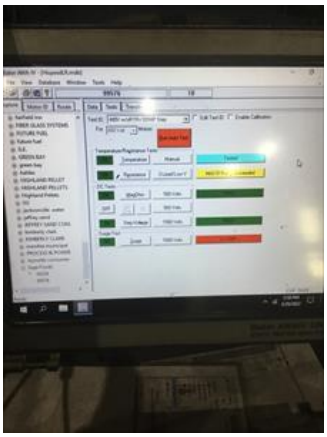
Priorities Found: **4 - Good**

General

1.	Job Number	**99576**
2.	Report Date	**03/29/2022**
3.	Customer	**Sage V Foods**

Name Plate Information

4.	Manufacturer	**Pentair**	P1
	Hydromatic		



5.	Model	**S4SD750M4-4**
6.	Serial Number	**10644376**
7.	Horsepower	**7.5**
8.	KW	
9.	Volts	**460**
10.	Amps	**12.6**
11.	RPM	**1750**
12.	Frame	**Sub Pump**
13.	Enclosure	**Sub Pump**
14.	Cycles	**60**
15.	Phase	**3**
16.	Service Factor	**1.2**
17.	Motor Mount Position	
18.	Inlet Diameter	
19.	Outlet Diameter	
20.	Flow Rate	
21.	Pressure Head	

Initial Pump Inspection

22.	Power Cord Wire Size	
23.	Power Cord # of Conductors	
24.	Power Cord Length	
25.	Power Cord Condtion	
26.	Sensor Cord Wire Size	
27.	Sensor Cord # of Conductors	
28.	Sensor Cord Length	
29.	Sensor Cord Condition	
30.	Sensor Cord for Thermal Protection?	
31.	Sensor Cord for Water Protection	
32.	Bowl Condition	

33.	Impeller Condition	**(P) Pass**	P95

34.	Number of Wear Rings	
35.	Wear Ring Condition	
36.	Wear Ring Size	
37.	Wear Ring Clearance to Impeller	
38.	Wear Ring Material	
39.	Seal Surfaces Condition	
40.	Seal Type	
41.	Number of Seals	**2**
42.	Seal Material on Rotary Face	
43.	Seal Material on Stationary Seat	
44.	Elastic Component Material	
45.	Seal OD	
46.	Seal ID	
47.	Seal Sleeve Material	
48.	Seal Plate Condition	
49.	Water Sensor in Seal Cavity?	
50.	Oil Filled Seal Cavity?	
51.	Oil Filled Stator?	

Initial Inspection

52.	Number of Leads	
53.	Lead Length	
54.	Lead Size	
55.	Lead Condition	
56.	Lead Markings	
57.	Lead Size for Oil Filled Stator	
58.	Lug Size, Condition, and Type	
59.	Overload Required?	
60.	Winding RTD's	
61.	Winding Rtd's Condition	
62.	Shaft Run Out	
63.	Does Shaft Turn Freely	

64.	Does Shaft Have Visible Damage	**yes. broken**	P115
	Machined and installed new shaft.		

65.	Bearing Rtd's		
66.	Bearing Rtd's Condition		
67.	Contamination		
68.	Frame Condition		
69.	Fan Condition	**(NA) Not Applicable**	
70.	Broken or missing components		
Initial Electric Test			
71.	Resistance to Ground		
72.	Winding Resistance 1-2		
73.	Winding Resistance 2-3		
74.	Winding Resistance 1-3		
75.	Resistive Imbalance		
76.	Hi-Pot		
77.	Surge Test		
78.	Stator Condition	**pass**	
79.	Failure Location		
Initial Rotor Inspection			
80.	Rotor Type	**squirrel cage laminate**	
81.	Air Gap <10% Variation		
82.	Number of Rotor Bars		
83.	Number of Broken Rotor Bars	**0**	
84.	Growler Test		
85.	Rotor Condition		
Mechanical Inspection			
86.	Bearing Manufacturer		
87.	Bearing DE Size		
88.	Bearing DE Type		
89.	DE Bearing Qty.	**1**	
90.	Bearing ODE Size		
91.	Bearing ODE Type		
92.	ODE Bearing Qty.	**1**	
93.	Insulated Bearing	**no**	
94.	Lubrication Type	**oil**	
95.	Grease Condition	**(NA) Not Applicable**	

96.	Bearing Retainers	**(NA) Not Applicable**
97.	Shaft Grounding Device	**(NA) Not Applicable**
98.	DE Seal	
99.	DE Seal Type/Size	
100.	ODE Seal	
101.	ODE Seal Type/Size	

Root Cause of Failure

102.	Component Failure	
103.	Cause of Failure	
104.	Comments	
105.	Service Technician	

Machine Fit Inspection Report

106.	Shaft Run Out	
107.	Initial Shaft Run Out	
108.	Final Shaft Run Out	
109.	DE Bearing Shaft Fit	
110.	DE Initial Shaft Bearing Fit Size 1	
111.	DE Initial Shaft Bearing Fit Size 2	
112.	DE Initial Shaft Bearing Fit Size 3	
113.	DE Finial Shaft Bearing Fit Size 1	
114.	DE Finial Shaft Bearing Fit Size 2	
115.	DE Finial Shaft Bearing Fit Size 3	
116.	ODE Bearing Shaft Fit	
117.	ODE Initial Shaft Bearing Fit Size 1	
118.	ODE Initial Shaft Bearing Fit Size 2	
119.	ODE Initial Shaft Bearing Fit Size 3	
120.	ODE Finial Shaft Bearing Fit Size 1	
121.	ODE Finial Shaft Bearing Fit Size 2	
122.	ODE Finial Shaft Bearing Fit Size 3	
123.	DE Air Seal Shaft Fit	
124.	DE Initial Air Seal Shaft Size	
125.	DE Final Air Seal Shaft Size	
126.	ODE Air Seal Shaft Fit	
127.	ODE Initial Air Seal Shaft Size	
128.	ODE Final Air Seal Shaft Size	
129.	DE Endbell Fit	
130.	DE Initial Endbell Fit Size 1	
131.	DE Initial Endbell Fit Size 2	
132.	DE Initial Endbell Fit Size 3	
133.	DE Final Endbell Fit Size 1	
134.	DE Finial Endbell Fit Size 2	
135.	DE Final Endbell Fit Size 3	
136.	DE Endbell Fit Insulated	
137.	DE Endbell Air Seal Fit	
138.	Initial Endbell Air Seal Fit Size	
139.	Finial Endbell Air Seal Fit Size	
140.	ODE Endbell Fit	
141.	ODE Initial Endbell Fit Size 1	

142.	ODE Initial Endbell Fit Size 2
143.	ODE Initial Endbell Fit Size 3
144.	ODE Final Endbell Fit Size 1
145.	ODE Final Endbell Fit Size 2
146.	ODE Final Endbell Fit Size 3
147.	ODE Endbell Fit Insulated
148.	ODE Endbell Air Seal Fit
149.	ODE Initial Endbell Seal Fit Size
150.	ODE Finial Endbell Seal Fit Size
151.	Foot Flatness
152.	Foot Condition
153.	Flange Condition
154.	Service Technician

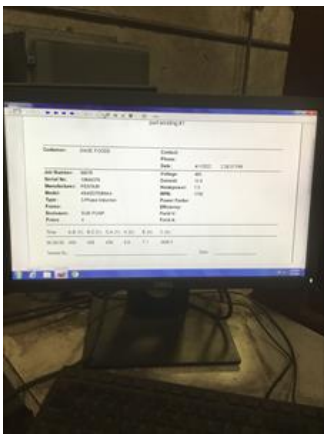
Balancing Report

155.	Balance Type
156.	Balance Operating Speed
157.	Start Left End
158.	Start Right End
159.	Balancing Specification
160.	Finish Left End
161.	Finish Right End
162.	Service Technician

Assembly and Final Test

163.	Rotor and Impeller Balanced
164.	Stator Housing Refilled with Oil (if required)
165.	Stator Pressure Test
166.	Seal Cavity Pressure Test
167.	Time Under Pressure
168.	Overload Continuity
169.	Water Sensor Open?
170.	Meggar Testing Reading
171.	Surge Test
172.	Hi-Pot
173.	Winding Resistance 1-2
174.	Winding Resistance 2-3
175.	Winding Resistance 1-3
176.	Test Run
177.	Test Run Voltage Phase A
178.	Test Run Amps A
179.	Test Run Voltage Phase B
180.	Test Run Amps B
181.	Test Run Voltage Phase C
182.	Test Run Amps C
183.	DE Horizontal Vibration Reading
184.	DE Vertical Vibration Reading
185.	DE Axial Vibration Reading
186.	ODE Horizontal Vibration Reading
187.	ODE Vertical Vibration Reading

	188. ODE Axial Vibration Reading		
	189. Ambient Temp at start of Test Run		
	190. Temp at 5 minutes		
	191. Temp at 10 minutes		
	192. Temp at 15 minutes		
	193. Temp at 20 minutes		
	194. Temp at 25 minutes		
	195. Temp at 30 minutes		
	196. Temp at 35 minutes		
	197. Temp at 40 minutes		
	198. Temp at 45 minutes		
	199. Temp at 50 minutes		
	200. Temp at 55 minutes		
	201. Temp at 60 minutes		
●	202. Motor Paint	**(P) Pass**	P186



203. Service Technician **Terrence. Holland**