



Submersible Pump Repair Report
MOUNTAIN VIEW WASTE WATER
340 WESTWOOD
MOUNTAIN VIEW, AR 72560

FolderID: 103421
FormID: 21377759

Submersible Pump Repair Report

Location: MOTOR SHOP LR

Serial Number: 9811014-B

Description: YEOMENS PUMP EVAL

Make: Yeoman

Model: 10/18/24-103421

Serial: 9811014-B

V: 460 (V)

A: 19.9 (A)

RPM: 1747 (RPM)

Hz: 60 (Hz)

Phase: 3

Service Factor: 1.15

Priorities Found: ● 5 - High ● 36 - Good

General



1. Job Number 103421

2. Report Date 09/03/2024

3. Customer 8 P27







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Initial Pump Inspection			
4.	Power Cord Wire Size	12 AWG	
5.	Power Cord # of Conductors	4	
6.	Power Cord Length	33 ft	
	7. Power Cord Condition	(P) Pass	
8.	Sensor Cord Wire Size	14 AWG	
9.	Sensor Cord # of Conductors	4	
10.	Sensor Cord Length	35 ft	
	11. Sensor Cord Condition	(F) Fail	P60
	Has a <i>smashed area</i>		


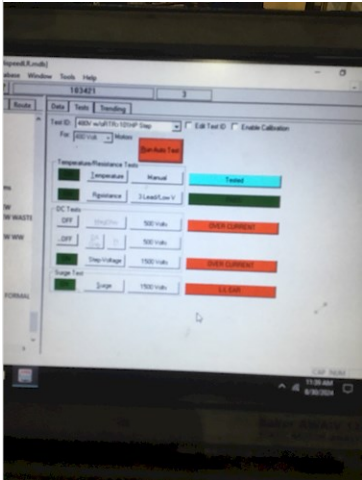






12. Sensor Cord for Thermal Protection?




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13.	Sensor Cord for Water Protection	(Y) Yes
14.	Bowl Condition	(P) Pass
15.	Impeller Condition	(P) Pass
16.	Number of Wear Rings	1
17.	Wear Ring Condition	(P) Pass
18.	Wear Ring Size	5 in
19.	Wear Ring Clearance to Impeller	in
20.	Wear Ring Material	stainless
21.	Seal Surfaces Condition	(P) Pass
22.	Seal Type	Mechanical
23.	Number of Seals	2
24.	Seal Material on Rotary Face	carbon
25.	Seal Material on Stationary Seat	ceramic
26.	Elastic Component Material	Viton
27.	Seal OD	mm
	70mm 64mm	
28.	Seal ID	in
	50mm 43.50mm	
29.	Seal Sleeve Material	
30.	Seal Plate Condition	(P) Pass
31.	Water Sensor in Seal Cavity?	(Y) Yes
32.	Oil Filled Seal Cavity?	(Y) Yes
33.	Oil Filled Stator?	(N) No
Initial Inspection		
34.	Number of Leads	3
35.	Lead Length	24 Inches
36.	Lead Size	14
37.	Lead Condition	(NA) Not Applicable
	Rewind	
38.	Lead Markings	1-3
39.	Lead Size for Oil Filled Stator	AWG
40.	Lug Size, Condition, and Type	
41.	Overload Required?	(Y) Yes
	Over loads are good	
42.	Winding RTD's	(NA) Not Applicable
43.	Winding Rtd's Condition	(NA) Not Applicable
44.	Shaft Run Out	
45.	Does Shaft Turn Freely	yes
46.	Does Shaft Have Visible Damage	
47.	Bearing Rtd's	(NA) Not Applicable
48.	Bearing Rtd's Condition	(NA) Not Applicable
49.	Contamination	
	Water	
50.	Frame Condition	(P) Pass
51.	Fan Condition	(NA) Not Applicable

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52.	Broken or missing components <i>Gromit is broke</i>		
Initial Electric Test			
53.	Resistance to Ground	Mohm	
54.	Winding Resistance 1-2	Ohm	
55.	Winding Resistance 2-3	Ohm's	
56.	Winding Resistance 1-3	Ohm's	
57.	Resistive Imbalance	%	
58.	Hi-Pot	Ua	
● 59.	Surge Test	(F) Fail	P56
			
60.	Stator Condition	rewind	
61.	Failure Location		
Initial Rotor Inspection			
62.	Rotor Type	squirrel cage aluminum	
● 63.	Air Gap <10% Variation	(NA) Not Applicable	
64.	Number of Rotor Bars		
65.	Number of Broken Rotor Bars		
● 66.	Growler Test	(P) Pass	
● 67.	Rotor Condition	(P) Pass	
Mechanical Inspection			
68.	Bearing Manufacturer	na	
69.	Bearing DE Size	6311-2RS	P18
 Contamination and frosting			
			



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70.	Bearing DE Type	sealed bearing	
71.	DE Bearing Qty.	1	
72.	Bearing ODE Size	5305	P42
<div> <div></div> Contamination and frosting </div>			
			
73.	Bearing ODE Type	double roll double ball	
74.	ODE Bearing Qty.	q	
75.	Insulated Bearing		
76.	Lubrication Type	grease	
77.	Grease Condition	(F) Fail	
78.	Bearing Retainers	(NA) Not Applicable	
79.	Shaft Grounding Device	(NA) Not Applicable	
80.	DE Seal	(Y) Yes	
<div> <div></div> Mechanical seal failed </div>			
81.	DE Seal Type/Size		
<div> <div></div> Mechanical seal </div>			
82.	ODE Seal	(NA) Not Applicable	
83.	ODE Seal Type/Size		
Root Cause of Failure			
84.	Component Failure	bearings, windings, and seals	
85.	Cause of Failure	Water contamination and seals failed	
86.	Comments	Recommend new o'rings, new seals, new bearings, and rewind	
87.	Service Technician	Cw	
			
<div> <div></div> Conn side 2.25 ode2.25winding 3#14Hi Temp Leads 1 Overload </div>			
Machine Fit Inspection Report			
88.	Shaft Run Out	(P) Pass	
89.	Initial Shaft Run Out	"	
90.	Final Shaft Run Out	"	

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91.	DE Bearing Shaft Fit	(P) Pass	
92.	DE Initial Shaft Bearing Fit Size		
	Measure 1	Measure 2	Measure 3
	2.1659	2.1658	2.1659
93.	DE Final Shaft Bearing Fit Size		
	Measure 1	Measure 2	Measure 3
94.	ODE Bearing Shaft Fit	(P) Pass	
95.	ODE Initial Shaft Bearing Fit Size		
	Measure 1	Measure 2	Measure 3
	0.9841	0.984	0.9841
96.	ODE Final Shaft Bearing Fit Size		
	Measure 1	Measure 2	Measure 3
97.	DE Air Seal Shaft Fit	(NA) Not Applicable	
98.	DE Air Seal Shaft Size		
	Initial	Final	
99.	ODE Air Seal Shaft Fit	(NA) Not Applicable	
100.	ODE Air Seal Shaft Size		
	Initial	Final	
101.	DE Endbell Fit	(P) Pass	
102.	DE Initial Endbell Fit Size		
	Measure 1	Measure 2	Measure 3
	4.7249	4.7248	4.7249
103.	DE Final Endbell Fit Size		
	Measure 1	Measure 2	Measure 3
104.	DE Endbell Fit Insulated	(NA) Not Applicable	
105.	DE Endbell Air Seal Fit	(NA) Not Applicable	
106.	DE Endbell Air Seal Fit Size		
	Initial	Final	
107.	ODE Endbell Fit	(P) Pass	
108.	ODE Initial Endbell Fit Size		
	Measure 1	Measure 2	Measure 3
	2.4416	2.4416	2.4417
109.	ODE Final Endbell Fit Size		
	Measure 1	Measure 2	Measure 3
110.	ODE Endbell Fit Insulated	(NA) Not Applicable	
111.	ODE Endbell Air Seal Fit	(NA) Not Applicable	
112.	ODE Endbell Air Seal Fit Size		
	Initial	Final	
113.	Foot Flatness	(NA) Not Applicable	
114.	Foot Condition	(NA) Not Applicable	

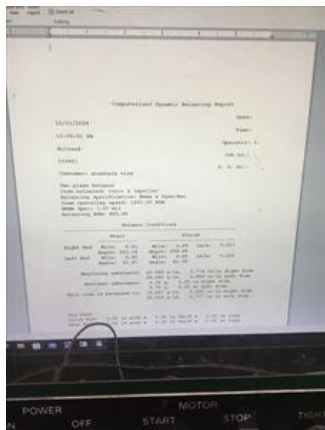
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115. Flange Condition	(P) Pass
116. Service Technician	Cw
	
 Co sign: RRW	

Balancing Report



117. Balance Type	two plane	P8
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118. Balance Operating Speed	1800 RPM
119. Start Left End	0.95 Mills
120. Start Right End	0.8100000000000001 Mills
121. Balancing Specification	nema & dyna balance spec 1.5 mills
122. Finish Left End	0.85 Mills
123. Finish Right End	0.6899999999999999 Mills
124. Service Technician	Terrence Holland






Assembly and Final Test








125. Rotor and Impeller Balanced	(Y) Yes	P3
		
126. Stator Housing Refilled with Oil (if required)	(NA) Not Applicable	
127. Stator Pressure Test	(P) Pass	P29
<div style="display: flex; justify-content: space-around;">   </div>		
128. Seal Cavity Pressure Test	(P) Pass	
129. Time Under Pressure	30 min	
130. Overload Continuity	(P) Pass	
131. Water Sensor Open?	(Y) Yes	
132. Meggar Testing Reading	Mohm	P61
		
133. Surge Test		
134. Hi-Pot	Ua	
Pass		

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135. Winding Resistance			
1-2	2-3	3-1	
136. Test Run	(P) Pass		
137. Test Run Voltage			P95
Phase A	Phase B	Phase C	
			
138. Test Run Current			P99
Phase A	Phase B	Phase C	
7.7	7.5	7.6	
			
139. DE Vibration Reading			
Horizontal	Vertical	Axial	
 Unable to because of bottom seal not immersed in fluid			
140. ODE Vibration Reading			
Horizontal	Vertical	Axial	
141. Ambient Temp at start of Test Run			Degrees F.
142. Temp at 5 minutes			Degrees F.
143. Temp at 10 minutes			Degrees F.
144. Temp at 15 minutes			Degrees F.
145. Temp at 20 minutes			Degrees F.
146. Temp at 25 minutes			Degrees F.

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147. Temp at 30 minutes	Degrees F.
148. Temp at 35 minutes	Degrees F.
149. Temp at 40 minutes	Degrees F.
150. Temp at 45 minutes	Degrees F.
151. Temp at 50 minutes	Degrees F.
152. Temp at 55 minutes	Degrees F.
153. Temp at 60 minutes	Degrees F.
154. Motor Paint	P141
<div><div></div><div></div><div></div><div></div><div></div></div>	
155. Service Technician	Terrence Holland

A handwritten signature in black ink, consisting of a stylized 'T' followed by a series of loops and a long horizontal stroke.

Co sign: RW