

Job Information

Job #: 137854

Date: August 30, 2018

Priority: 2

Authorized OT: No

Authorized by:

Customer Information

Name: Desoto county utility

Reason:

Contact:

Motor#:

PO#:

Application: Direct Drive

Special notes:

Name Plate Information

Manufacturer: Fairbanks Morse

Enclosure : Weather Protected
I (WPI)

Enclosure Type image

Serial#: 1518943

Model#:

Service Factor: 1.15

Frame: 360t

Horsepower/kW: 100

Rated RPM: 1780

Rated Amps: 118

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: Yes



Nameplate

DE

ODE

F1

F2

Top



WEST TENNESSEE

7030 Ryburn Drive
Millington, TN 38053
Phone 901-873-5300
Fax 901-873-5301

CENTRAL ARKANSAS

6812 Lindsey Rd.
Little Rock, AR 72206
Phone 501-375-9178
Fax 501-375-4254

Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): None

Shaft rotation: CW

Contaminant(s) Amt: None

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn

Bearings DE make: Other

Insulated: No

Bearing DE Size: 5318 open

Bearings ODE: Worn

Bearings ODE make: NTN

Bearing Type: Ball

Bearing ODE Size: 310 2rs

Bearings Retainer: Yes

Thermal Protection: No

Retainer condition: —

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: Watery

Grease Amt ODE: Full

Grease Cond. ODE: Watery

Seals DE type: Other

Seals Image:



Seals DE size:

Seals DE (inbound) condition : Bad

Seals ODE type: Other

Seals Image 2:



Seals ODE size:

Seals ODE (inbound) condition : Bad

Shaft damage cause: None

Shaft Image:



Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: N/A

Fan: N/A

Frame cond.: Good



Motor Mount Position: Other

Endbell type: Single piece

Missing parts?

- | | | |
|--------------------------------------|----------------------------------|--------------------------------|
| <input type="checkbox"/> J-Box cover | <input type="checkbox"/> O-rings | <input type="checkbox"/> J-Box |
| <input type="checkbox"/> HH cover | <input type="checkbox"/> Glands | <input type="checkbox"/> None |

Other missing parts

Endbell Image:

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Mechanical Inspection (Continued)

Air Gap Measurements (N/A on Single Piece Endbell)

Does Air Gap Meet Customer or EASA spec(<10% variation)?

DE @ 0

ODE @ 0

—

DE @ 90

ODE @ 90

DE @ 180

ODE @ 180

DE @ 270

ODE @ 270

AC Electrical Inspection

Number of leads: 3

Terminal Markings:

Length of leads: 30in

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads: 4awg

1-Blue
2-White
3-Orange
4-Yellow

5-Black
6-No color assigned
7-No color assigned
8-Red

P1-No color assigned
P2-Brown

Lead condition: Good

Lug type: Eyelet

Connections As Received:

Lug Condition: Good

Terminal

Lugs

Lug size: 4awg

Lug Attachment: Acceptable



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 60

Num broken bars: 0

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ok

If other, stator condition:

Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



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AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: Good

Winding Thermal Protection ODE: —

Stator test results: Salvageable



Megs incoming: Good

Surge incoming: Good

Hi-pot incoming: Good

Winding Resistance Incoming

	Phases A to B	Phases B to C	Phases C to A	Resistive imbalance
Incoming	0.7	0.6	0.7	

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers: Good



Conclusion

Component Failure

Pump had worn flute housing and impeller they need replace

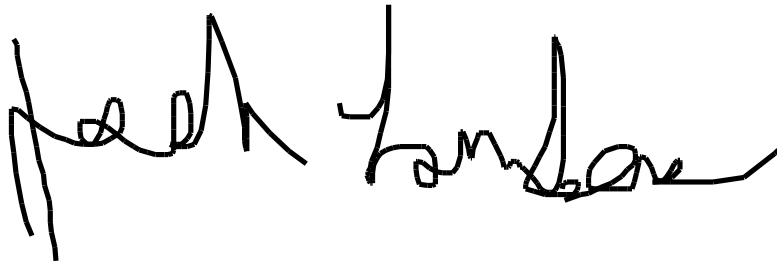
Cause of Failure

Comments

Need to replace mechanical seals upper and lower and replace impeller and flute and suction ring also replace bearings

Service Tech name: Josh landers

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Josh Landers'.**WEST TENNESSEE**

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