

### **Job Information**

Job #: 137977 Date: October 9, 2018

Priority: 2 Authorized OT: No Authorized by:

## **Customer Information**

Name: West Memphis utilities Reason:

Contact: Motor#: PO#:

Application: – Special notes:

## **Name Plate Information**

Manufacturer: Fairbanks Enclosure: Weather Protected Enclosure Type image

I (WPI)

Serial#: 232383 Model#:

Service Factor: Frame: 210t

Horsepower/kW: 14.6 Rated RPM: 1152

Rated Amps: 23.6 Rated Voltage: 460

Phase: 3 Cycles: 60

Special design: Yes

Nameplate DE ODE F1 F2 Top















## **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No Contaminant(s): None

Shaft rotation: — Contaminant(s) Amt: None

Shaft grounding device No Contaminant Image:

present?:

Shaft runout(TIR-Inbound):

Type of grounding device:

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 6212

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6207

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: — Thermal Protection Type: —

Bearing Type Image





Bearing Retainer Image



Thermal Protection



Seals Image 2:



## **Mechanical Inspection (Continued)**

Lubrication Type: Oil Thermal Protection device DE: -

Lubrication brand inbound: Unknown Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: Full Grease Cond. DE: Watery

Grease Amt ODE: Full Grease Cond. ODE: Other

Seals DE type: Other Seals Image:

Seals DE size:

Seals ODE type: Other

Seals ODE size:

Seals ODE (inbound) condition

Seals DE (inbound) condition:

Shaft damage cause: None Shaft Image:

WEST TENNESSEE 7030 Ryburn Drive Millington, TN 38053 Phone 901-873-5300

x 901-873-5301

CENTRAL ARKANSAS 6812 Lindsey Rd. Little Rock, AR 72206 Phone 501-375-9178 fax 501-375-4254



# **Mechanical Inspection (Continued)**

Brg. Image:



Bushings/sleeves image:



Water jacket: Ok



Fan: O

Ok

Frame cond.:

Good



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Endbell Image:

Single piece

Missing parts?

☐ J-Box cover

O-rings

☐ J-Box

☐ HH cover

Glands

☐ None



Other missing parts

Flute housing



## **Mechanical Inspection (Continued)**

Air Gap Meaurements (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: 9 Terminal Markings:

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Length of leads: 30in

Markings Identified By Color:

P1-No color assigned 5-Black 1-Blue Size of leads: 14 P2-Brown

2-White 6-No color assigned

3-Orange 7-No color assigned

4-Yellow 8-Red Lead condition: Bad

Connections As Received: Eyelet Lug type:

Lug Condition: Bad Terminal Lugs

Lug size: 14

Lug Attachment:

Replace



## **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Num rotor bars: 48

Num broken bars:

Rotor



### **Rotor Test Results**

**Rotor Condition:** 

Visual: Pass Growler: Pass Single phase: Pass

Stator type: Other If other, stator type:

Stator condition: Ground If other, stator condition:

Failure location: In slot If other, stator failure:

Stator Image: Failure Image:







## **AC Electrical Inspection (Continued)**

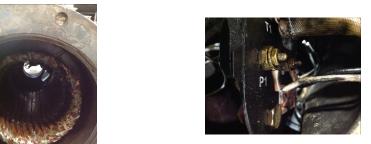
Winding color: Still has color Winding image Winding Thermal Protection: Yes

Winding condition: Brittle

Winding Thermal \_\_\_\_ Protection DE:

Winding Thermal Protection ODE:

Stator test results: Rewind



Megs incoming: Bad Surge incoming: Bad Hi-pot incoming: Bad

**Winding Resistance Incoming** 

Phases A to B Phases B to C Phases C to A Resistive imbalance

Incoming

Leads/jumpers: Loose terminal Lead jumper Image. :

If other, leads/jumpers:





### Conclusion

### **Component Failure**

Stator rewind, bearings, mechanical seals upper and lower and o ring kit plus needs new terminal board.

#### **Cause of Failure**

Had water in windings upper seal messed up and cord housing needs new exposure

#### **Comments**

Rewind stator ode bearing housing bad. Needs cooper grind off rotor

Service Tech name: Josh landers

Service Tech signature:

fach