

Job Information

Job #: 139376

Date: April 8, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: West Memphis utilities

Reason: Motor inspection

Contact:

Motor#:

PO#:

Application: Direct Drive

Special notes:

Name Plate Information

Manufacturer: Fairbanks

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 232383

Model#:

Service Factor:

Frame: 210t

Horsepower/kW: 14.6

Rated RPM: 1152

Rated Amps: 23.2

Rated Voltage: 460

Phase: 3

Cycles:

Special design: No



Nameplate

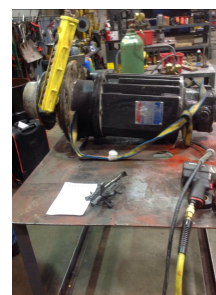
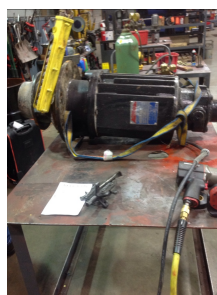
DE

ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

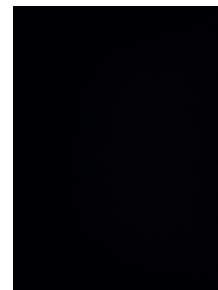
Contaminant(s): None

Shaft rotation: —

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: SKF

Insulated: No

Bearing DE Size: 6212 ZZ

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 6207zz

Bearings Retainer: No

Thermal Protection: No

Retainer condition: —

Thermal Protection Type: —

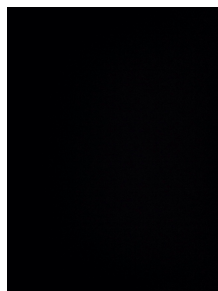
Bearing Type Image



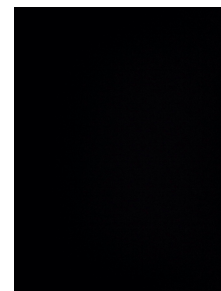
Bearing Make Image



Bearing Retainer Image



Thermal Protection



Mechanical Inspection (Continued)

Lubrication Type: Oil

Thermal Protection device DE: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 1/4

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

Seals DE type: Other

Seals Image:

Seals DE size: Mechanical

Seals DE (inbound) condition : Bad



Seals ODE type: Other

Seals Image 2:

Seals ODE size: Mechanical

Seals ODE (inbound) condition :
Ok



Shaft damage cause: None

Shaft Image:

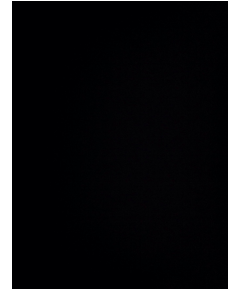


Mechanical Inspection (Continued)

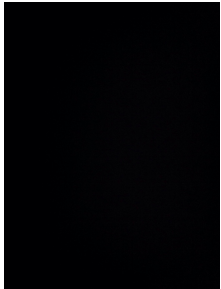
Brg. Image:



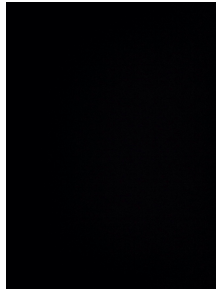
Bushings/sleeves image:



Water jacket: N/A



Fan: N/A



Frame cond.: Good



Motor Mount Position: Vertical Flange mount

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 checked="" type="checkbox"/> None |

Other missing parts

Endbell Image:



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: 9

Terminal Markings:

Length of leads: 18 inches

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

Size of leads: 12 awg

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:

Connections As Received:

Lug Condition: Good

Lug size:

Lug Attachment: —

Terminal



Lugs



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 38

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: Other

If other, stator failure:

Stator Image:



Failure Image:



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

AC Electrical Inspection (Continued)

Winding color: Like new

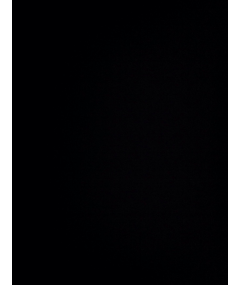
Winding image

Winding Thermal Protection: No

Winding condition : Solid

Winding Thermal
Protection DE: —Winding Thermal
Protection ODE: —

Stator test results: Rewind



Megs incoming: Good

Surge incoming: Bad

Hi-pot incoming: Good

Winding Resistance Incoming

Phases A to B

Phases B to C

Phases C to A

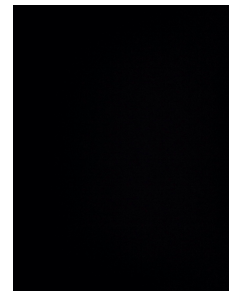
Resistive imbalance

Incoming

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:





MILLINGTON, TN

LITTLE ROCK, AR

Conclusion

Component Failure

Seals and impeller

Cause of Failure

Customer dead headed Pump

Comments

Stator shorted.

Service Tech name: Dan Mahan

Service Tech signature:

A handwritten signature in black ink, consisting of a large 'D' followed by a horizontal line and a stylized 'm'.

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