

Job Information

Job #: 136549

Date: March 15, 2018

Priority: 2

Authorized OT: No

Authorized by:

Customer Information

Name: South Treatment Plant

Reason:

Contact: Ronnie Cobb

Motor#:

PO#:

Application: Direct Drive

Special notes:

Name Plate Information

Manufacturer: US

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#:

Model#: G41644/21021100
4T3R-3

Service Factor: 1.15

Frame: 6808PA

Horsepower/kW: 350

Rated RPM: 595

Rated Amps: 59

Rated Voltage: 4000

Phase: 3

Cycles: 60

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: Bi-directional

Contaminant(s) Amt: None

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): .002

Bearings DE: Worn

Bearings DE make: FAG

Insulated: No

Bearing DE Size:

Bearings ODE: Worn

Bearings ODE make: FAG

Bearing Type: Ball

Bearing ODE Size:

Bearings Retainer: Yes

Thermal Protection: No

Retainer condition: Good

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



Mechanical Inspection (Continued)

Lubrication Type: Oil

Thermal Protection device DE: N/A

Lubrication brand inbound: Unknown

Thermal Protection device ODE: N/A

Lubrication brand outbound: Unknown

Grease Amt DE: Full

Grease Cond. DE: Other

Grease Amt ODE: Full

Grease Cond. ODE: Other

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

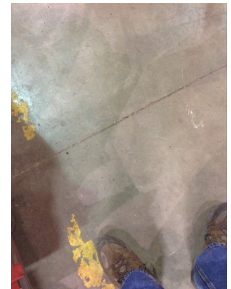
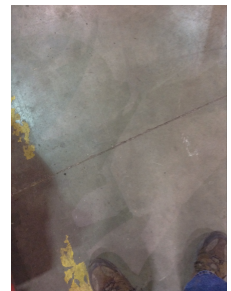
Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition
:

Shaft damage cause: None

Shaft Image:



Mechanical Inspection (Continued)

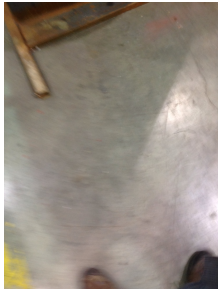
Brg. Image:



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: 3

Terminal Markings: Brown/Orange/Yellow

Length of leads: 36"

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

Size of leads: #6

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: Bad

Connections As Received: N/A

Lug type: Ring

Lug Condition: Bad

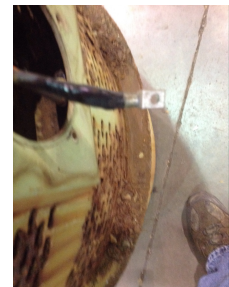
Lug size: 1/4" hole

Lug Attachment: Replace

Terminal



Lugs



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 84

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: Old age

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: 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	0.865200	0.865200	0.865100	0.0

Leads/jumpers: Replace

Lead jumper Image. :



If other, leads/jumpers:



MILLINGTON, TN

LITTLE ROCK, AR

Conclusion

Component Failure

Cleanup or rewind of motor and mechanical problems.

Cause of Failure

Lower bearing bad. Winding.

Comments

We need to cut lower bearing to determine cause of failure.
Winding checks good, but it is an old winding.

Service Tech name: Marc Pilgrim

Service Tech signature:

A handwritten signature in black ink that reads 'Marc Pilgrim'.

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