Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

Submersible Pump Repair Report

Tyson Foods (10280)
200 E. Cherry
Clarksville, AR 72830

FolderID: 103576
FormID: 21781773

Submersible Pump Repair Report

Location: LITTLE ROCK MOTOR SHOP

Serial Number:

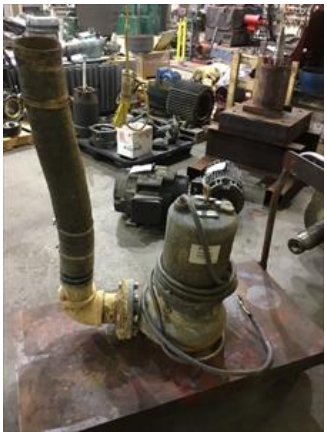
Description: 7.5hp Goulds Pump

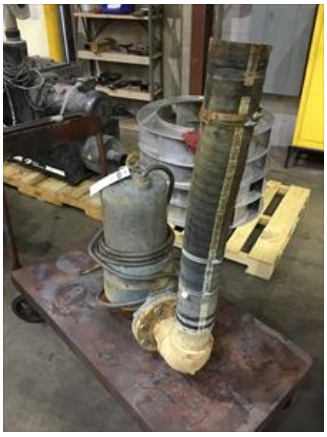
Make:	GOULDS
HP:	7.5 (HP)
Model:	HS7534D4
V:	460 (V)
A:	11.5 (A)
RPM:	1725 (RPM)
Hz:	60 (Hz)
Phase:	3

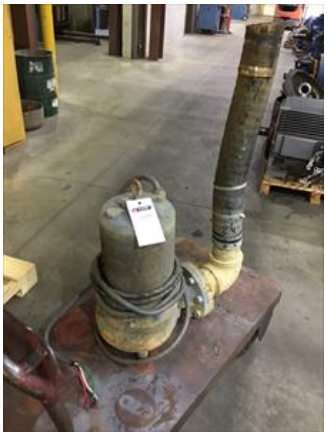
Priorities Found: **3 - High** **20 - Good**

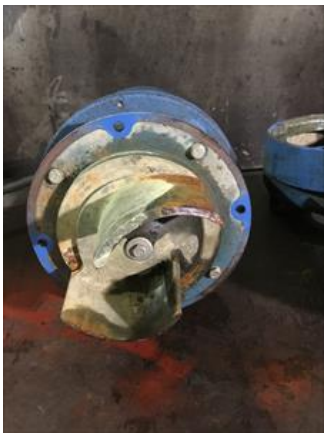
General

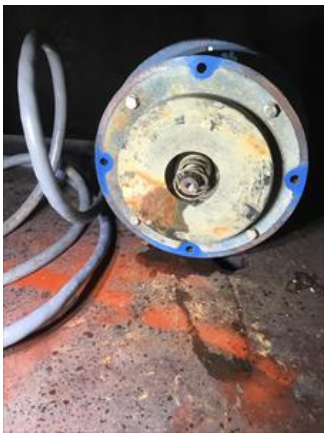
1.	Job Number	**103576**	
2.	Report Date		
3.	Customer	**Tyson foods**	P27

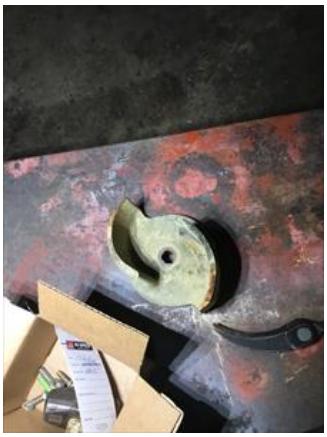


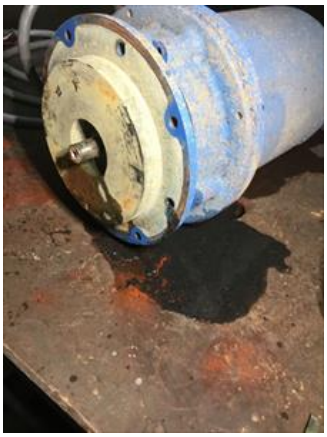


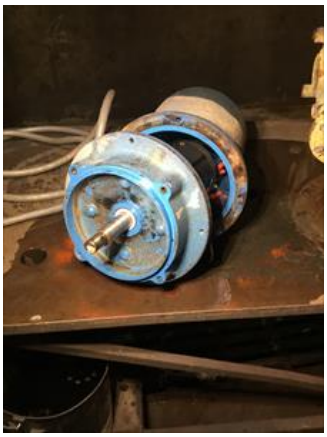


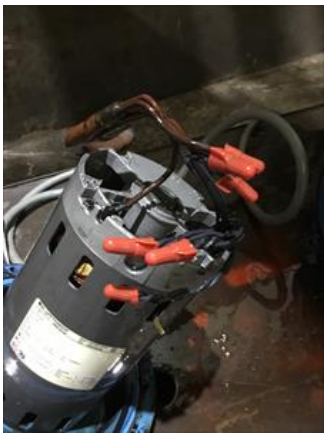


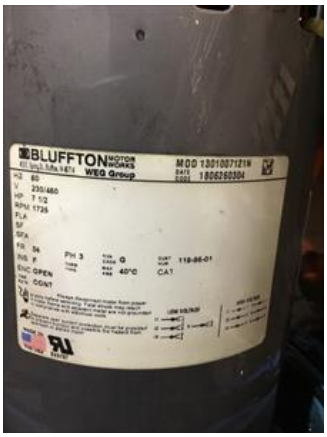


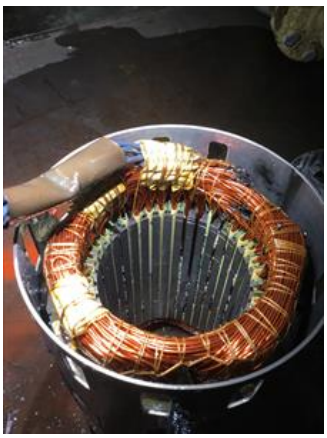


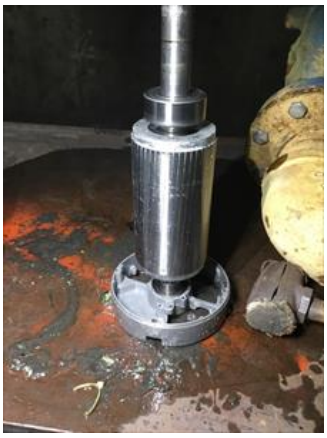


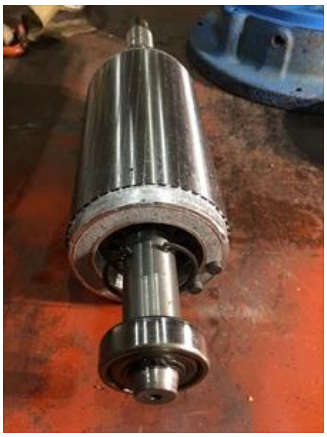






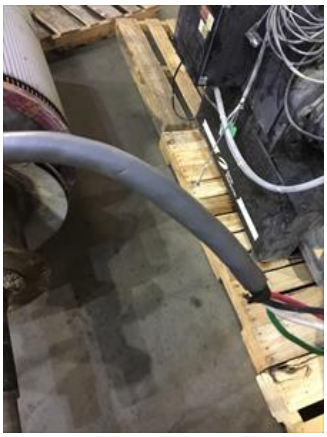


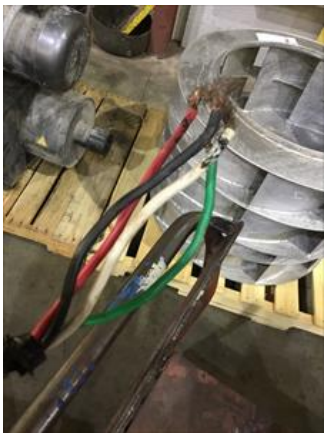




Initial Pump Inspection

4.	Power Cord Wire Size	**10 AWG**	
5.	Power Cord # of Conductors	**4**	P19





6.	Power Cord Length	**21 ft**	
7.	Power Cord Condtion	**(P) Pass**	
8.	Sensor Cord Wire Size	**AWG**	
9.	Sensor Cord # of Conductors		
10.	Sensor Cord Length	**ft**	
11.	Sensor Cord Condition		
12.	Sensor Cord for Thermal Protection?		
13.	Sensor Cord for Water Protection		

	14.	Bowl Condition	
●	15.	Impeller Condition	**(P) Pass**
	16.	Number of Wear Rings	
●	17.	Wear Ring Condition	**(P) Pass**
	18.	Wear Ring Size	**in**
	19.	Wear Ring Clearance to Impeller	**in**
	20.	Wear Ring Material	
●	21.	Seal Surfaces Condition	**(F) Fail**
		Shaft seal surface	
	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	
	27.	Seal OD	**1.7325 in**
	28.	Seal ID	**1.125 in**
		Seal shaft surface.	
	29.	Seal Sleeve Material	
●	30.	Seal Plate Condition	**(P) Pass**
●	31.	Water Sensor in Seal Cavity?	**(N) No**
●	32.	Oil Filled Seal Cavity?	**(Y) Yes**
●	33.	Oil Filled Stator?	**(Y) Yes**
Initial Inspection			
	34.	Number of Leads	**9**
	35.	Lead Length	**10 Inches**
	36.	Lead Size	
●	37.	Lead Condition	**(P) Pass**
	38.	Lead Markings	**1-9**
	39.	Lead Size for Oil Filled Stator	**AWG**
	40.	Lug Size, Condition, and Type	
●	41.	Overload Required?	**(N) No**
	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	**yes**
		Seal surface worn	
	47.	Bearing Rtd's	**(NA) Not Applicable**
●	48.	Bearing Rtd's Condition	**(NA) Not Applicable**
	49.	Contamination	
		Yes: water	
●	50.	Frame Condition	**(P) Pass**
●	51.	Fan Condition	**(NA) Not Applicable**
	52.	Broken or missing components	
		None	
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	**(NA) Not Applicable**	P56

	60.	Stator Condition	**rewind**	
	61.	Failure Location	**stator windings blown**	

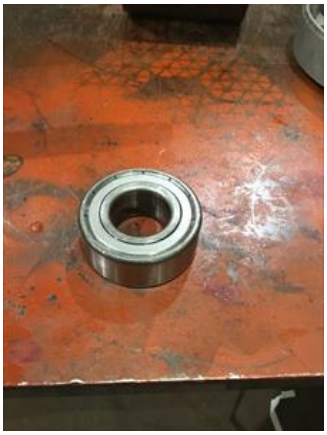
Initial Rotor Inspection

	62.	Rotor Type	**squirrel cage aluminum**	
●	63.	Air Gap <10% Variation	**(NA) Not Applicable**	
	64.	Number of Rotor Bars	**48**	
	65.	Number of Broken Rotor Bars	**0**	
●	66.	Growler Test	**(P) Pass**	
●	67.	Rotor Condition	**(P) Pass**	

Mechanical Inspection

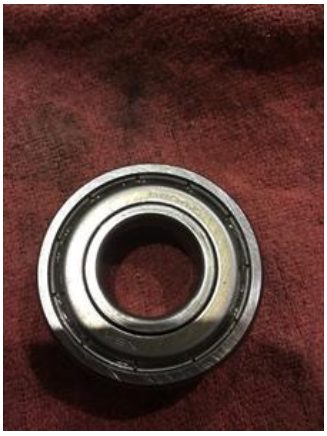
	68.	Bearing Manufacturer	**NSK**	
	69.	Bearing DE Size	**206**	P18

206 Double wide. Double row

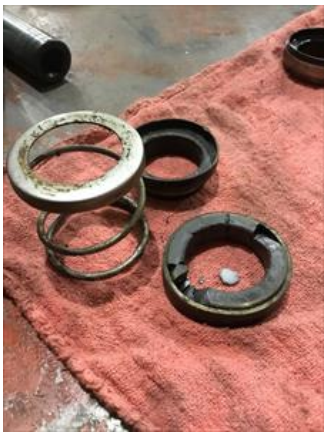


	70.	Bearing DE Type	**Double wide**	
	71.	DE Bearing Qty.	**1**	

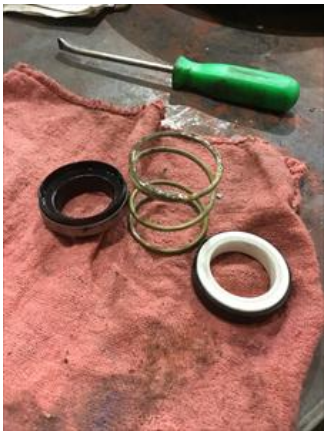
	72.	Bearing ODE Size	**6204**	P42



	73.	Bearing ODE Type	**ball bearing**	
	74.	ODE Bearing Qty.	**1**	
	75.	Insulated Bearing		
	76.	Lubrication Type	**oil**	
	77.	Grease Condition		
	78.	Bearing Retainers	**(NA) Not Applicable**	
	79.	Shaft Grounding Device	**(NA) Not Applicable**	
●	80.	DE Seal	**(Y) Yes**	P81



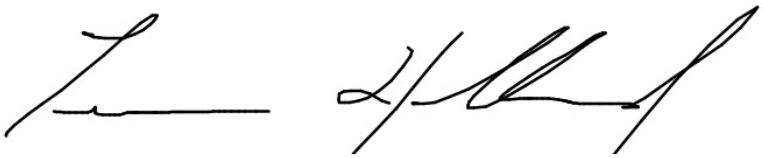
	81.	DE Seal Type/Size	**mechanical carbon / sic**	
●	82.	ODE Seal	**(Y) Yes**	P89



83.	ODE Seal Type/Size	**carbon ceramic**

Root Cause of Failure

84.	Component Failure	**lower and upper seals**
85.	Cause of Failure	
	Seal failure allowed water to penetrate the winding housing shorting the coils.	
86.	Comments	
87.	Service Technician	**Terrence Holland**



Machine Fit Inspection Report

88.	Shaft Run Out	
89.	Initial Shaft Run Out	**"**
90.	Final Shaft Run Out	
91.	DE Bearing Shaft Fit	**(P) Pass**
92.	DE Initial Shaft Bearing Fit Size	

Measure 1	Measure 2	Measure 3
1.1812	**1.1813**	**1.1814**

93.	DE Final Shaft Bearing Fit Size	

Measure 1	Measure 2	Measure 3

94.	ODE Bearing Shaft Fit	**(F) Fail**
95.	ODE Initial Shaft Bearing Fit Size	

Measure 1	Measure 2	Measure 3
0.7865		

Minimum allowed is 0.7875

96.	ODE Final Shaft Bearing Fit Size	

Measure 1	Measure 2	Measure 3

97.	DE Air Seal Shaft Fit	
98.	DE Air Seal Shaft Size	

Initial	Final

99.	ODE Air Seal Shaft Fit	
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

103.	DE Final Endbell Fit Size	

Measure 1	Measure 2	Measure 3

104.	DE Endbell Fit Insulated	

105.	DE Endbell Air Seal Fit		
106.	DE Endbell Air Seal Fit Size		
	Initial	Final	
107.	ODE Endbell Fit		
108.	ODE Initial Endbell Fit Size		
	Measure 1	Measure 2	Measure 3
109.	ODE Final Endbell Fit Size		
	Measure 1	Measure 2	Measure 3
110.	ODE Endbell Fit Insulated		
111.	ODE Endbell Air Seal Fit		
112.	ODE Endbell Air Seal Fit Size		
	Initial	Final	
113.	Foot Flatness		
114.	Foot Condition		
115.	Flange Condition		
116.	Service Technician		

Balancing Report

117.	Balance Type		
118.	Balance Operating Speed		
119.	Start Left End		
120.	Start Right End		
121.	Balancing Specification		
122.	Finish Left End		
123.	Finish Right End		
124.	Service Technician		

Assembly and Final Test

125.	Rotor and Impeller Balanced		
126.	Stator Housing Refilled with Oil (if required)		
127.	Stator Pressure Test		
128.	Seal Cavity Pressure Test		
129.	Time Under Pressure		
130.	Overload Continuity		
131.	Water Sensor Open?		
132.	Meggar Testing Reading		
133.	Surge Test		
134.	Hi-Pot		
135.	Winding Resistance		
	1-2	2-3	3-1
136.	Test Run		
137.	Test Run Voltage		
	Phase A	Phase B	Phase C

138.	Test Run Current		
	Phase A	Phase B	Phase C
139.	DE Vibration Reading		
	Horizontal	Vertical	Axial
140.	ODE Vibration Reading		
	Horizontal	Vertical	Axial
141.	Ambient Temp at start of Test Run		
142.	Temp at 5 minutes		
143.	Temp at 10 minutes		
144.	Temp at 15 minutes		
145.	Temp at 20 minutes		
146.	Temp at 25 minutes		
147.	Temp at 30 minutes		
148.	Temp at 35 minutes		
149.	Temp at 40 minutes		
150.	Temp at 45 minutes		
151.	Temp at 50 minutes		
152.	Temp at 55 minutes		
153.	Temp at 60 minutes		
154.	Motor Paint		
155.	Service Technician		