

## **Job Information**

Job #:	139071				Date:	February 6, 2019
Priority:	_	Authorized OT:	No	Authorized by:		
Customer	Information					
Name:	Skyline	Location:		Co	ntact:	
Name Pla	te Information					
Manufacturer:	N/A			Ratio:		
Serial#:				Type :		
Model#:				Horsepower/kW:		
Input Speed:				Output Speed:		
Application ID:				Coupling Type:		

## **Gearbox Visual Inspection**

	Wear	Physical	Contaminants
Oil:	Unacceptable	Unacceptable	Unacceptable
Gears:	Unacceptable	Unacceptable	Unacceptable
Seals:	Unacceptable	Unacceptable	Unacceptable

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



## MILLINGTON, TN LITTLE ROCK, AR

# **Gearbox Inspection (Continued)**







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







## **Gearbox Inspection (Continued)**

Environmental Conditions :	Severe/Hostile	Ambient Temperature :
Signs of excessive heat:	No	Humidity :
Signs of lubricant leaks:	Yes	Gearbox temperature :
Moisture present:	Yes	

## **Gearbox Inspection & Evaluation Checklist**

1. Primary drive rotates input shaft in correct direction	Yes
2. Condition of machinery guards if present	N/A
3. Condition of coupling guards	N/A
4. Type of coupler	2 piece coupling
5. Condition of coupler	Present/Acceptable
6. Coupling Alignment	
7. Condition of housing	Acceptable
8. Condition of mounting hardware	Acceptable
9. Breather vent (ventilator) installed	N/A
10. Condition of piping & connections(if forced lube system installed)	N/A

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



## **Gearbox Inspection & Evaluation Checklist (Continued)**

11. Condition of switches, alarms, heaters, coolers, or other devices	N/A
12. Condition of inspection covers	Present/Acceptable
13. Condition of seals & bearings	Damaged
14. Gearbox oil level	Unacceptable
15. Type & grade of specified lubricant	
16. Correct type & grade of specified lubricant	Unknown
17. Appearance of lubricant	Contaminated
18. Free rotation of shafts	Yes
19. Condition of input shaft	Damaged
20. Endplay of input shaft	
21. Condition of output shaft	Damaged
22. Endplay of output shaft	

#### 23. Gear backlash

WEST TENNESSE 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 Acceptable



## **Gearbox Inspection & Evaluation Checklist (Continued)**

26. Gear tooth contact Damaged	24. Gear tooth condition	Damaged
27. Identify type of gear tooth contact A. Perfect contact - no modification needed B. Acceptable contact - Gear with end ease-off modification - slight crowning. C. Acceptable contact - Gear with crowning modification - slight crowning modification - slight crowning modification - slight crowning modification - Gear with crowning modification - Gear shafts slightly off parallel E. NOT Acceptable contact - Gear shafts out of parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - Gear shafts out of parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - (if no lead modification present) gear and/or pinion miscut - correct parts H. NOT Acceptable contact - (if no lead modification present)	25. Degree of wear	Severe
A. A. A. A. A. A. Perfect contact - in modification needed B. Acceptable contact - Gear with end ease-off modification - slight crowning. C. Acceptable contact - Gear shafts slightly off parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - Gear shafts out of parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - Gear shafts out of parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - Gear shafts	26. Gear tooth contact	Damaged
A. B. C. C. C. C. C. C. C. C. C. C	27. Identify type of gear tooth contact	
Slight crowning. C. Acceptable contact - Gear with crowning modification D. Acceptable contact - Gear shafts slightly off parallel F. NOT Acceptable contact - Gear shafts out of parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - (if no lead modification present) gear and/or pinion miscut - correct parts H. NOT Acceptable contact - (if no lead modification present)		B. Acceptable contact -
D. Gear shafts slightly off parallel E. NOT Acceptable contact - Gear shafts out of parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - (if no lead modification present) gear and/or pinion miscut - correct parts H. NOT Acceptable contact - (if no lead modification present)	C.	C. Acceptable contact - Gear with crowning modification
F. Gear shafts out of parallel F. NOT Acceptable contact - Gear shafts out of parallel G. NOT Acceptable contact - (if no lead modification present) gear and/or pinion miscut - correct parts H. NOT Acceptable contact - (if no lead modification present) gear and/or pinion miscut - correct parts	D.	Gear shafts slightly off parallel
F. Gear shafts out of parallel G. NOT Acceptable contact - (if no lead modification present) gear and/or pinion miscut - correct parts H. NOT Acceptable contact - (if no lead modification present)	E.	Gear shafts out of parallel
G. (if no lead modification present) gear and/or pinion miscut - correct parts H. NOT Acceptable contact - (if no lead modification present)	F.	Gear shafts out of parallel
H. (if no lead modification present)	G.	(if no lead modification present)
	H.	(if no lead modification present)

#### Typical Contact Patterns for Double Helical Gears

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



#### **Gearbox Comments**

Output shaft no good. Output shaft bearing is completely destroyed. Output shaft coupling is no good. Output shaft gear is is worn and pitted caused from moisture inside gearbox. Intermediate gear is no good. Inboard shaft/spline is wiped out.

#### Conclusion

Service Tech name:

Dan Mahan

Service Tech signature:

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