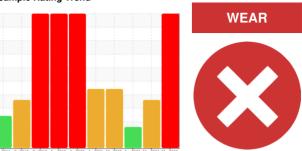


# **PROBLEM SUMMARY**

Sample Rating Trend



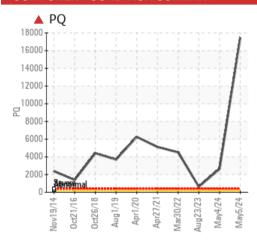
Machine Id

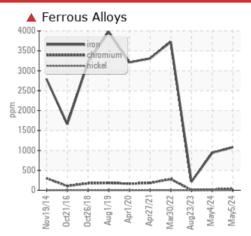
# TURBINA 20 - FRONT BEARING (S/N 101181)

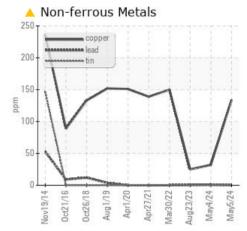
Grease

KLUBER KLUBERPLEX BEM 41-141 (--- LTR)

### COMPONENT CONDITION SUMMARY







#### **RECOMMENDATION**

Re-sample to verify the actual oil condition. Purge old grease if still abnormal and monitor the trend of iron level. No corrective action is recommended at this time.

PROBLEMATIC '	TEST RE	SULTS				
Sample Status				SEVERE	ABNORMAL	ABNORMAL
PQ		ASTM D8184	>200	<b>17477</b>	<u>^</u> 2638	629
Iron	ppm	ASTM D5185m	>250	<b>1083</b>	<b>938</b>	215
Chromium	ppm	ASTM D5185m	>10	<b>4</b> 0	<u> </u>	3
Copper	ppm	ASTM D5185m	>75	<u> </u>	32	25

Customer Id: EOLOMAN Sample No.: WC0881147 Lab Number: 06194911 Test Package: GRS 1



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 dougb@wearcheckusa.com

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED	ENDED ACTIONS				
Action	Status	Date	Done By	Description	
Monitor			?	Re-sample to verify the actual oil condition. Purge old grease if still abnormal and monitor the trend of iron level.	
Change Fluid			?	Re-sample to verify the actual oil condition. Purge old grease if still abnormal and monitor the trend of iron level.	
Resample			?	Re-sample to verify the actual oil condition. Purge old grease if still abnormal and monitor the trend of iron level.	

### HISTORICAL DIAGNOSIS

#### 04 May 2024 Diag: Doug Bogart

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.Bearing and/or bushing wear is indicated. There is no indication of any contamination in the grease. The condition of the grease is acceptable for the time in service.



#### 23 Aug 2023 Diag: Doug Bogart

No corrective action is recommended at this time. All component wear rates are normal. Elemental level of silicon (Si) above normal. The condition of the grease is acceptable for the time in service.



#### 30 Mar 2022 Diag: Doug Bogart

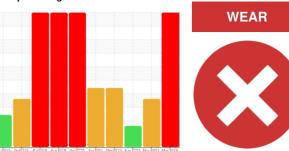
We recommend an early resample to monitor this condition. The iron level is abnormal. The very high ferrous density (PQ) index indicates that severe wear is occurring. There is a trace of moisture present in the grease. The AN level is acceptable for this fluid.





# **GREASE ANALYSIS**

Sample Rating Trend



Machine Id

# TURBINA 20 - FRONT BEARING (S/N 101181)

Grease

Grease

KLUBER KLUBERPLEX BEM 41-141 (--- LTR)

## DIAGNOSIS

#### Recommendation

Re-sample to verify the actual oil condition. Purge old grease if still abnormal and monitor the trend of iron level. No corrective action is recommended at this time.

### Wear

An increase in the wear is noted. Bearing and/or bushing wear is indicated.

#### **Grease Condition**

The condition of the grease is acceptable for the time in service.

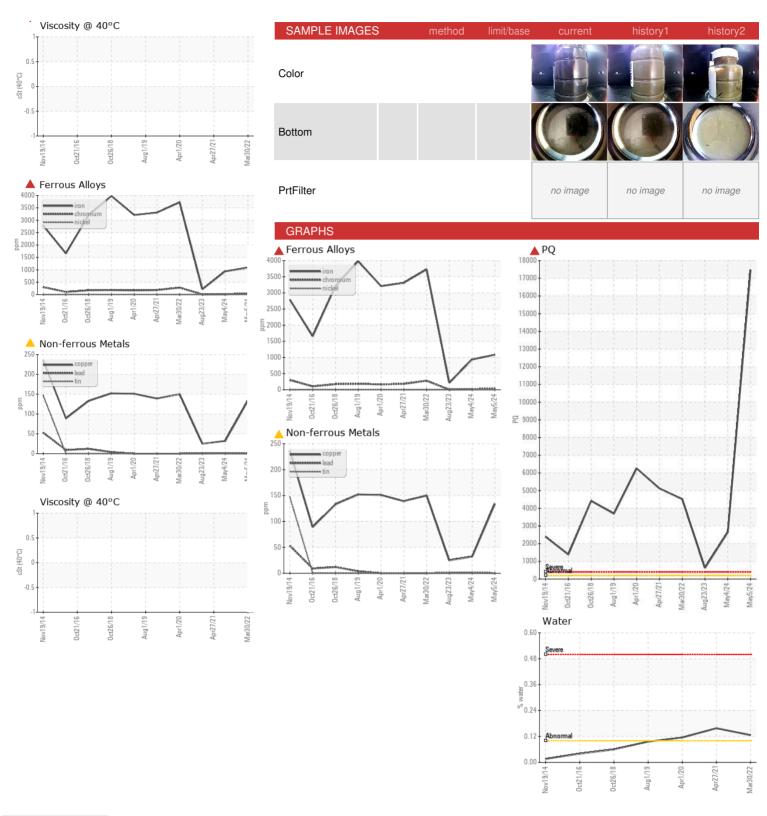
#### Contaminants

There is no indication of any contamination in the grease.

R)		Nov2014 Oct2	016 Oct2018 Aug2019 Apr2	020 Apr2021 Mar2022 Aug2023 May	2024 May2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0881147	WC0881139	WC0505300
Sample Date		Client Info		05 May 2024	04 May 2024	23 Aug 2023
Machine Age	yrs	Client Info		12	2	11
Grease Age	yrs	Client Info		1	1	1
Grease Serviced		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>200	<b>17477</b>	<u>^</u> 2638	629
ron	ppm	ASTM D5185m	>250	<b>1083</b>	<u>\$\text{938}\$</u>	215
Chromium	ppm	ASTM D5185m	>10	<b>4</b> 0	<u> </u>	3
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Cadmium	ppm	ASTM D5185m		0	1	<1
Гitanium	ppm	ASTM D5185m		<1	1	2
/anadium	ppm	ASTM D5185m		<1	2	<1
_ead	ppm	ASTM D5185m	>25	0	1	<1
Copper	ppm	ASTM D5185m	>75	<b>134</b>	32	25
Γin	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	7
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		137	165	106
Magnesium	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		7	3	<1
Molybdenum	ppm	ASTM D5185m		550	4935	2813
Phosphorus	ppm	ASTM D5185m		528	971	914
Zinc	ppm	ASTM D5185m		60	277	95
THICKENER/SO/	AP	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	13	9
Calcium	ppm	ASTM D5185m		10	21	19
Sodium	ppm	ASTM D5185m		2	22	13
_ithium	ppm	ASTM D5185m		384	3341	2938
Sulfur	ppm	ASTM D5185m		4000	4823	3172
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>150	420	249	<b>△</b> 1089
Potassium	ppm	ASTM D5185m		<1	5	1
GREASE CONDI	TION	method	limit/base	current	history1	history2
Grease Color		*Visual	yellow	Brown	Yellow	
Texture		*In-house		Buttery	Short fiber	
NLGI Consistency	NLGI Scale	*SKF Method	1	0-1	0-1	



## **GREASE ANALYSIS**







Laboratory Sample No.

Lab Number : 06194911 Unique Number : 11057034

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0881147

Received **Tested** Diagnosed

: 29 May 2024 : 13 Jun 2024

: 13 Jun 2024 - Doug Bogart

DEL SEMAFORO DEL CLUB TERRAZA, 1 CUADRA AL SUR MANAGUA, ZZ NI

**EOLO DE NICARAGUA S.A.** 

Contact: Rafael Bermudez

Test Package : GRS 1 ( Additional Tests: KV40, SCREEN ) Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

F: Contact/Location: Rafael Bermudez - EOLOMAN

Report Id: EOLOMAN [WUSCAR] 06194911 (Generated: 06/15/2024 09:05:00) Rev: 1

T: