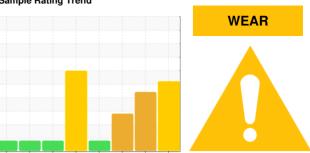


## **GREASE ANALYSIS**

Sample Rating Trend



Machine Id

# TURBINA 19 - REAR BEARING (S/N 101289)

Grease

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

### **DIAGNOSIS**

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates appear stable.

#### **Grease Condition**

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

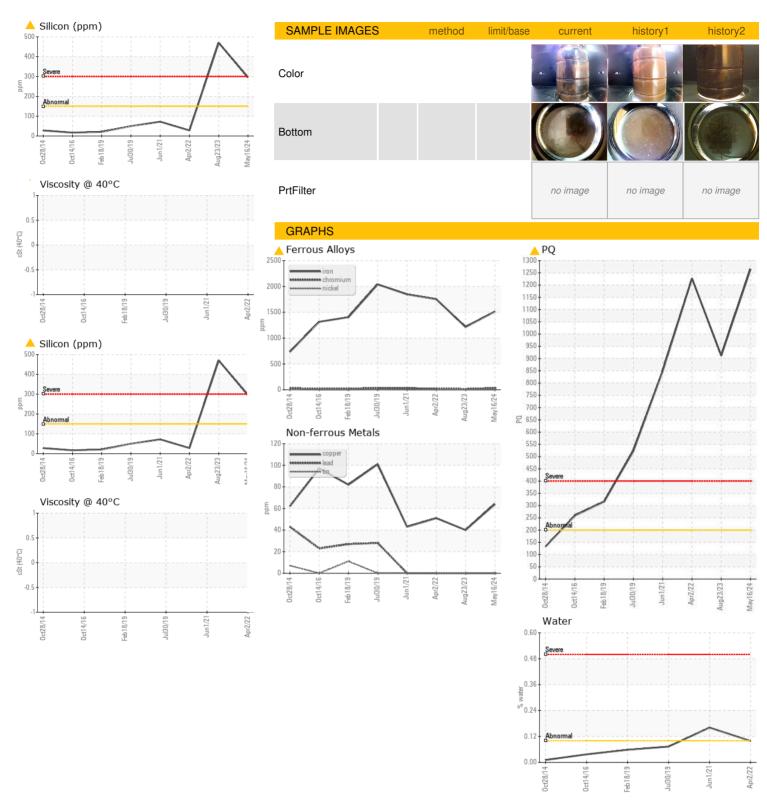
#### Contaminants

There is no indication of any contamination in the grease.

R)		0ct2014 (	0ct2016 Feb2019 Jul201	19 Jun2021 Apr2022 Aug2023	May2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC06194900	WCI2352739	WCI2352761
Sample Date		Client Info		16 May 2024	23 Aug 2023	02 Apr 2022
Machine Age	yrs	Client Info		12	11	6
Grease Age	yrs	Client Info		1	1	0
Grease Serviced		Client Info		N/A	N/A	N/A
Sample Status				MARGINAL	ABNORMAL	MARGINAL
CONTAMINATION	V	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>1265</b>	<b>△</b> 912	<u> </u>
Iron	ppm	ASTM D5185m	>250	<u> </u>	<u>1214</u>	<u>▲</u> 1752
Chromium	ppm	ASTM D5185m	>10	<b>4</b> 33	13	19
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Vanadium	ppm	ASTM D5185m		1	<1	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>75	64	40	51
Tin	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>5	<1	<1	0
ADDITIVES		and the seal	limit/base		la la La mud	history
ADDITIVES		method	IIIIII/base	current	history1	history2
Boron	ppm	ASTM D5185m	ilmit/base	197	177	231
	ppm ppm		iimii/base			
Boron	• • • • • • • • • • • • • • • • • • • •	ASTM D5185m	iimii/base	197	177	231
Boron Magnesium	ppm	ASTM D5185m ASTM D5185m	iimii/base	197 0	177 1	231 8
Boron Magnesium Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	ilmii/base	197 0 14	177 1 10	231 8 13
Boron Magnesium Manganese Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	ilmii/base	197 0 14 3135	177 1 10 2090	231 8 13 439
Boron Magnesium Manganese Molybdenum Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	IIIIII/base	197 0 14 3135 740	177 1 10 2090 559	231 8 13 439 393
Boron Magnesium Manganese Molybdenum Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	197 0 14 3135 740	177 1 10 2090 559 265	231 8 13 439 393 420
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		197 0 14 3135 740 325	177 1 10 2090 559 265	231 8 13 439 393 420
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		197 0 14 3135 740 325 	177 1 10 2090 559 265 history1	231 8 13 439 393 420 
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA	ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m		197 0 14 3135 740 325  current	177 1 10 2090 559 265 history1	231 8 13 439 393 420  history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		197 0 14 3135 740 325  current 0 9	177 1 10 2090 559 265 history1 0 7	231 8 13 439 393 420  history2 4 13
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		197 0 14 3135 740 325  current 0 9 68	177 1 10 2090 559 265 history1 0 7	231 8 13 439 393 420  history2 4 13 149
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium	ppm	ASTM D5185m		197 0 14 3135 740 325  current 0 9 68 33	177 1 10 2090 559 265 history1 0 7 74	231 8 13 439 393 420  history2 4 13 149 23
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium	ppm	ASTM D5185m		197 0 14 3135 740 325  current 0 9 68 33 2867	177  1 10 2090 559 265 history1 0 7 74 3 2366	231 8 13 439 393 420  history2 4 13 149 23 1161
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur	ppm	ASTM D5185m	limit/base	197 0 14 3135 740 325  current 0 9 68 33 2867 5730	177 1 10 2090 559 265 history1 0 7 74 3 2366 5256	231 8 13 439 393 420  history2 4 13 149 23 1161 6712
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m	limit/base	197 0 14 3135 740 325 current 0 9 68 33 2867 5730 current	177 1 10 2090 559 265 history1 0 7 74 3 2366 5256 history1	231 8 13 439 393 420  history2 4 13 149 23 1161 6712 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m	limit/base	197 0 14 3135 740 325	177 1 10 2090 559 265 history1 0 7 74 3 2366 5256 history1  ▲ 470	231 8 13 439 393 420 history2 4 13 149 23 1161 6712 history2 28
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm	ASTM D5185m	limit/base limit/base >150	197 0 14 3135 740 325	177 1 10 2090 559 265 history1 0 7 74 3 2366 5256 history1  470 0	231 8 13 439 393 420 history2 4 13 149 23 1161 6712 history2 28 4
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDIT	ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base limit/base >150 limit/base	197 0 14 3135 740 325	177 1 10 2090 559 265 history1 0 7 74 3 2366 5256 history1  ▲ 470 0 history1	231 8 13 439 393 420 history2 4 13 149 23 1161 6712 history2 28 4 history2



## **GREASE ANALYSIS**





Certificate 12367

Laboratory Sample No.

: WC06194900 Lab Number : 06194900

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 29 May 2024 **Tested** : 13 Jun 2024

**EOLO DE NICARAGUA S.A.** DEL SEMAFORO DEL CLUB TERRAZA, 1 CUADRA AL SUR MANAGUA, ZZ

Unique Number : 11057023 Diagnosed : 13 Jun 2024 - Doug Bogart Test Package : GRS 1 ( Additional Tests: KV40, SCREEN ) 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.

T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F:

Contact: Rafael Bermudez

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