

# **GREASE ANALYSIS**

Sample Rating Trend



**NORMAL** 



Machine Id

# TURBINA 13 - REAR BEARING (S/N 101311) Component Grease

KLUBER KLUBERPLEX BEM 41-141 (--- LTF

### Recommendation

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

All component wear rates are normal.

## **Grease Condition**

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

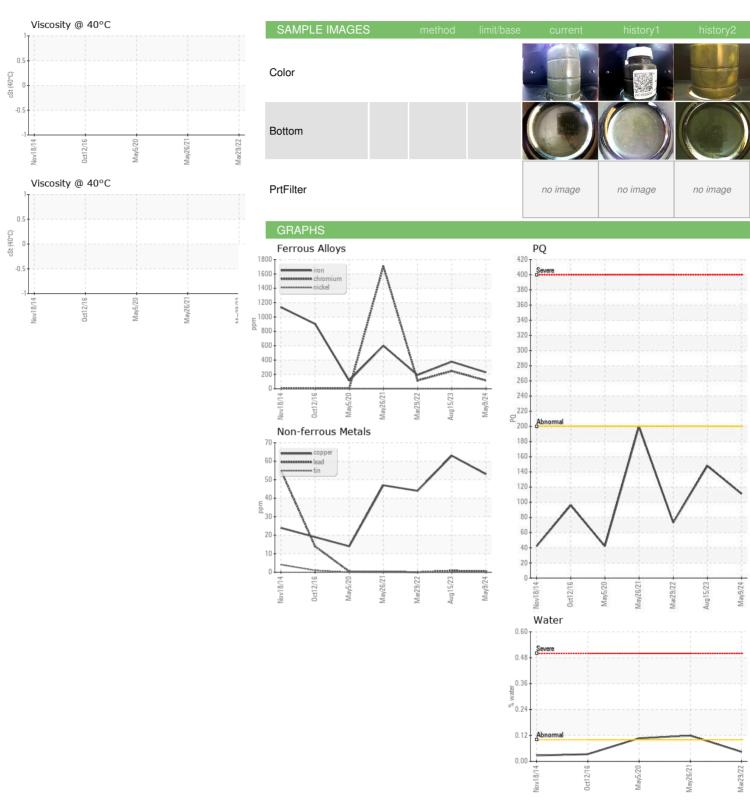
## Contaminants

There is no indication of any contamination in the grease.

R)		Nov2014	Oct2016 May2020	May2021 Mar2022 Aug2023	May2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC06194925	WC0505282	WC05582755
Sample Date		Client Info		09 May 2024	15 Aug 2023	29 Mar 2022
Machine Age	mths	Client Info		36	48	6
Grease Age	mths	Client Info		6	6	0
Grease Serviced		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
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	111	148	73
Iron	ppm	ASTM D5185m	>250	229	376	191
Chromium	ppm	ASTM D5185m	>10	115	247	115
Nickel	ppm	ASTM D5185m	>5	0	0	0
Cadmium	ppm	ASTM D5185m		1	1	<1
Titanium	ppm	ASTM D5185m		<1	1	2
Vanadium	ppm	ASTM D5185m		1	2	<1
Lead	ppm	ASTM D5185m	>25	<1	<1	0
Copper	ppm	ASTM D5185m	>75	53	63	44
Tin	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>5	0	<1	<1
ADDITIVEC		and a the seal	11		11.	0. سماماط
ADDITIVES		method	limit/base	current	history1	history2
	ppm	ASTM D5185m	Ilmit/base	current 144	179	85
Boron	ppm		limit/base			
Boron Magnesium		ASTM D5185m	limit/base	144	179	85
Boron Magnesium Manganese	ppm	ASTM D5185m ASTM D5185m	limit/base	144 0	179 0	85 0
Boron Magnesium Manganese Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	IIMII/base	144 0 8	179 0 9	85 0 4
Boron Magnesium Manganese Molybdenum Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	IImit/base	144 0 8 3970	179 0 9 4930	85 0 4 1965
Boron Magnesium Manganese Molybdenum Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	Ilmivoase	144 0 8 3970 949	179 0 9 4930 1041	85 0 4 1965 740
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	144 0 8 3970 949 255	179 0 9 4930 1041 190	85 0 4 1965 740 41
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		144 0 8 3970 949 255	179 0 9 4930 1041 190	85 0 4 1965 740 41
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		144 0 8 3970 949 255 	179 0 9 4930 1041 190 	85 0 4 1965 740 41 
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium	ppm ppm ppm ppm ppm ppm	ASTM D5185m		144 0 8 3970 949 255  current	179 0 9 4930 1041 190  history1	85 0 4 1965 740 41  history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		144 0 8 3970 949 255  current 0 13	179 0 9 4930 1041 190 history1 0 15	85 0 4 1965 740 41  history2 5 6
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/Aluminum Barium Calcium Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		144 0 8 3970 949 255  current 0 13	179 0 9 4930 1041 190 history1 0 15	85 0 4 1965 740 41  history2 5 6 7
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium	ppm	ASTM D5185m		144 0 8 3970 949 255  current 0 13 9 40	179 0 9 4930 1041 190 history1 0 15 11 41	85 0 4 1965 740 41  history2 5 6 7 18
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium	ppm	ASTM D5185m		144 0 8 3970 949 255 current 0 13 9 40 3055	179 0 9 4930 1041 190 history1 0 15 11 41 3598	85 0 4 1965 740 41  history2 5 6 7 18 2192
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium Sulfur	ppm	ASTM D5185m	limit/base	144 0 8 3970 949 255  current 0 13 9 40 3055 4183	179 0 9 4930 1041 190 history1 0 15 11 41 3598 5331	85 0 4 1965 740 41  history2 5 6 7 18 2192 2534
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m	limit/base	144 0 8 3970 949 255 current 0 13 9 40 3055 4183 current	179 0 9 4930 1041 190 history1 0 15 11 41 3598 5331 history1	85 0 4 1965 740 41  history2 5 6 7 18 2192 2534 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m  Method ASTM D5185m	limit/base	144 0 8 3970 949 255 current 0 13 9 40 3055 4183 current	179 0 9 4930 1041 190 history1 0 15 11 41 3598 5331 history1  ▲ 398	85 0 4 1965 740 41  history2 5 6 7 18 2192 2534 history2 28
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDI	ppm	ASTM D5185m	limit/base limit/base >150	144 0 8 3970 949 255 current 0 13 9 40 3055 4183 current 206 6	179 0 9 4930 1041 190 history1 0 15 11 41 3598 5331 history1  ▲ 398 4	85 0 4 1965 740 41  history2 5 6 7 18 2192 2534 history2 28 <1
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm	ASTM D5185m	limit/base limit/base >150 limit/base	144 0 8 3970 949 255 current 0 13 9 40 3055 4183 current 206 6 current	179 0 9 4930 1041 190 history1 0 15 11 41 3598 5331 history1  ▲ 398 4 history1	85 0 4 1965 740 41 history2 5 6 7 18 2192 2534 history2 28 <1



## **GREASE ANALYSIS**







Laboratory Sample No.

: WC06194925 Lab Number : 06194925 Unique Number : 11057048

: 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

Diagnosed : 13 Jun 2024 - Doug Bogart 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.

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

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

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