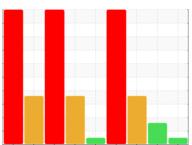


# **GREASE ANALYSIS**

Sample Rating Trend



**NORMAL** 



Machine Id

# **TURBINA 07 - FRONT BEARING**

Component

KLUBER KLUBERPLEX BEM 41-141 (--- LTF

#### Recommendation

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

### Wear

All component wear rates are normal.

#### **Grease Condition**

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

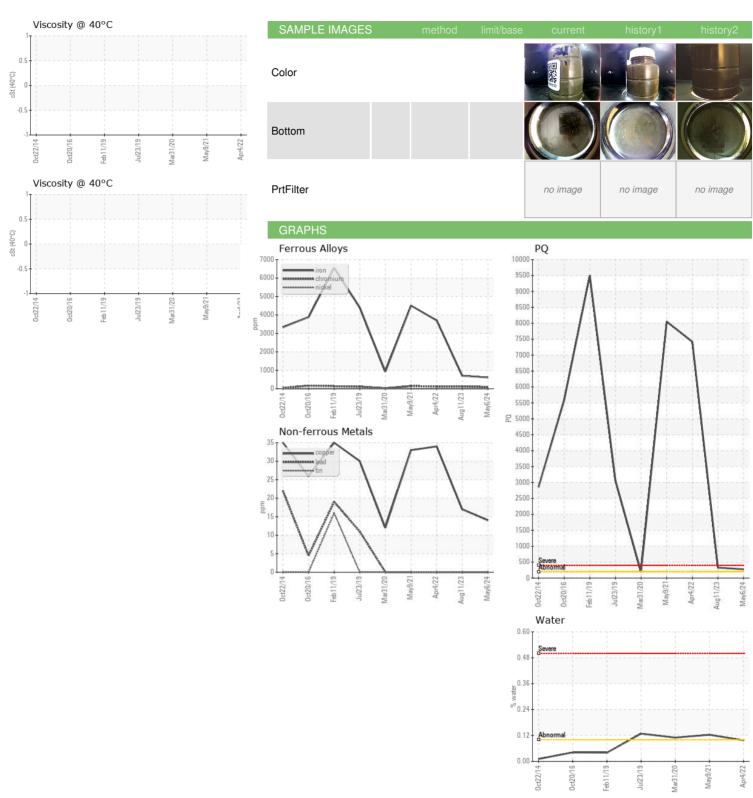
#### Contaminants

There is no indication of any contamination in the grease.

R)		Oct2014 Oct	2016 Feb2019 Jul2019	Mar2020 May2021 Apr2022 Aug20	23 May2024	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0881133	WC0831532	WC05582756
Sample Date		Client Info		06 May 2024	11 Aug 2023	04 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				NORMAL	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	276	326	<b>▲</b> 7420
Iron	ppm	ASTM D5185m	>250	608	707	<b>△</b> 3705
Chromium	ppm	ASTM D5185m	>10	97	128	<u> </u>
Nickel	ppm	ASTM D5185m	>5	0	0	0
Cadmium	ppm	ASTM D5185m		<1	<1	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	14	17	34
Tin	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>5	<1	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		190	190	209
Magnesium	ppm	ASTM D5185m		0	2	2
Manganese	ppm	ASTM D5185m		8	9	26
Manganese Molybdenum	ppm			8 2836	9 2936	26 2173
•		ASTM D5185m				
Molybdenum	ppm	ASTM D5185m ASTM D5185m		2836	2936	2173
Molybdenum Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		2836 618	2936 525	2173 357
Molybdenum Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2836 618 222	2936 525 387	2173 357 164
Molybdenum Phosphorus Zinc Antimony	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2836 618 222 	2936 525 387	2173 357 164
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	2836 618 222 	2936 525 387  history1	2173 357 164 
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	2836 618 222  current	2936 525 387  history1	2173 357 164  history2
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium	ppm ppm ppm ppm AP ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m METHOD ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2836 618 222  current 0 11	2936 525 387  history1 0 9	2173 357 164  history2 8 5
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium	ppm ppm ppm ppm ppm AP ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2836 618 222  current 0 11	2936 525 387  history1 0 9 104	2173 357 164  history2 8 5 121
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium	ppm ppm ppm ppm AP ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2836 618 222  current 0 11 81 28	2936 525 387  history1 0 9 104 34	2173 357 164  history2 8 5 121 18
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium	ppm ppm ppm ppm AP ppm ppm ppm ppm ppm	ASTM D5185m	limit/base	2836 618 222  current 0 11 81 28 2471	2936 525 387  history1 0 9 104 34 2820	2173 357 164  history2 8 5 121 18 2070
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur	ppm ppm ppm ppm AP ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m		2836 618 222  current 0 11 81 28 2471 5531	2936 525 387  history1 0 9 104 34 2820 5647	2173 357 164  history2 8 5 121 18 2070 6177
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method  ASTM D5185m	limit/base	2836 618 222 current 0 11 81 28 2471 5531 current	2936 525 387 history1 0 9 104 34 2820 5647 history1	2173 357 164  history2 8 5 121 18 2070 6177 history2
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m	limit/base	2836 618 222 current 0 11 81 28 2471 5531 current 330	2936 525 387 history1 0 9 104 34 2820 5647 history1	2173 357 164 history2 8 5 121 18 2070 6177 history2
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm	ASTM D5185m	limit/base >150	2836 618 222 current 0 11 81 28 2471 5531 current 330 6	2936 525 387 history1 0 9 104 34 2820 5647 history1  723 3	2173 357 164 history2 8 5 121 18 2070 6177 history2 95
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDIT	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m  Method ASTM D5185m Method	limit/base >150	2836 618 222 current 0 11 81 28 2471 5531 current 330 6 current	2936 525 387 history1 0 9 104 34 2820 5647 history1  123 3 history1	2173 357 164 history2 8 5 121 18 2070 6177 history2 95 2 history2



## **GREASE ANALYSIS**







Laboratory Sample No.

: WC0881133 Lab Number : 06194896 Unique Number : 11057019

: 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.

\* - 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)

Report Id: EOLOMAN [WUSCAR] 06194896 (Generated: 06/15/2024 08:57:13) Rev: 1

Contact/Location: Rafael Bermudez - EOLOMAN

NI

T:

F: