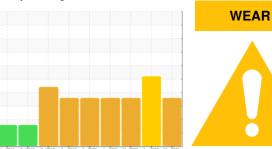


GREASE ANALYSIS

Sample Rating Trend



Machine Id

TURBINA 22 - REAR BEARING (S/N 101168)

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.

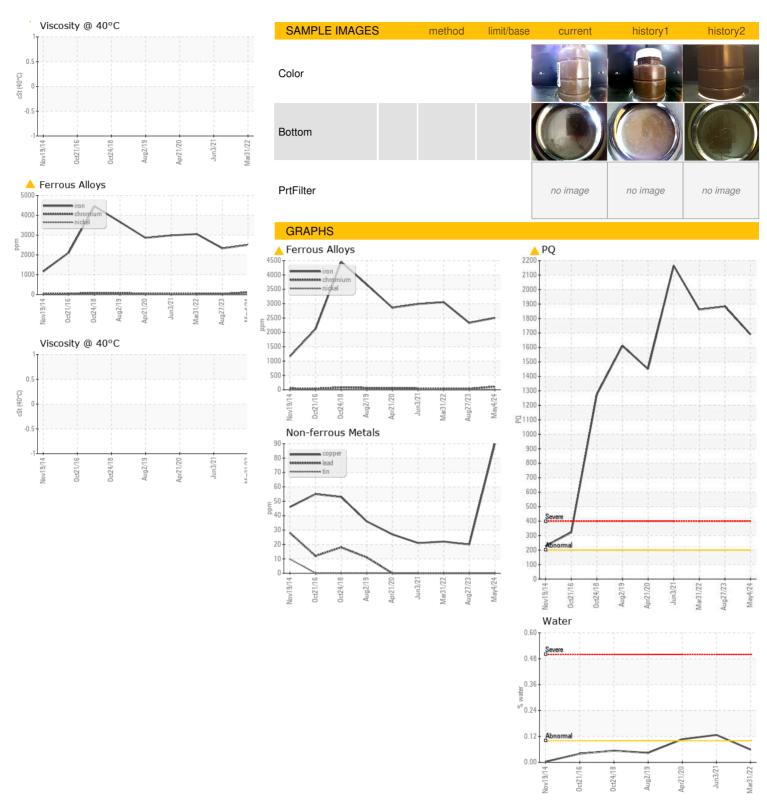
Contaminants

There is no indication of any contamination in the grease.

H)		1002011 000	LOTO SULCTO PROGLETO	Apr2020 Jun2021 Mar2022 Aug20		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0881144	WC0505294	WC05582740
Sample Date		Client Info		04 May 2024	27 Aug 2023	31 Mar 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
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	1690	<u> </u>	<u> </u>
Iron	ppm	ASTM D5185m	>250	<u> </u>	<u>\$\text{2328}\$</u>	△ 3053
Chromium	ppm	ASTM D5185m	>10	<u> </u>	▲ 36	4 3
Nickel	ppm	ASTM D5185m	>5	0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
Titanium	ppm	ASTM D5185m		1	<1	<1
Vanadium	ppm	ASTM D5185m		2	<1	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>75	90	20	22
Tin	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>5	0	<1	2
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 212	history1 186	217
	ppm		limit/base			
Boron Magnesium Manganese		ASTM D5185m	limit/base	212	186	217
Boron Magnesium	ppm	ASTM D5185m ASTM D5185m	limit/base	212 0	186 1	217
Boron Magnesium Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	212 0 26	186 1 20 2692 534	217 2 26 2538 536
Boron Magnesium Manganese Molybdenum Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	212 0 26 3748	186 1 20 2692	217 2 26 2538
Boron Magnesium Manganese Molybdenum Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	212 0 26 3748 667	186 1 20 2692 534	217 2 26 2538 536
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	212 0 26 3748 667	186 1 20 2692 534 168	217 2 26 2538 536 151
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		212 0 26 3748 667 341	186 1 20 2692 534 168	217 2 26 2538 536 151 history2
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		212 0 26 3748 667 341 	186 1 20 2692 534 168 	217 2 26 2538 536 151
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium	ppm ppm ppm ppm ppm ppm	ASTM D5185m		212 0 26 3748 667 341 current 0 15 122	186 1 20 2692 534 168 history1 0 13 121	217 2 26 2538 536 151 history2 8 17
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m		212 0 26 3748 667 341 current 0 15 122 37	186 1 20 2692 534 168 history1 0 13 121 29	217 2 26 2538 536 151 history2 8 17 155
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		212 0 26 3748 667 341 current 0 15 122	186 1 20 2692 534 168 history1 0 13 121 29 2558	217 2 26 2538 536 151 history2 8 17 155 31 2273
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m		212 0 26 3748 667 341 current 0 15 122 37	186 1 20 2692 534 168 history1 0 13 121 29	217 2 26 2538 536 151 history2 8 17 155
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium	ppm	ASTM D5185m		212 0 26 3748 667 341 current 0 15 122 37 3141	186 1 20 2692 534 168 history1 0 13 121 29 2558	217 2 26 2538 536 151 history2 8 17 155 31 2273
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur	ppm	ASTM D5185m	limit/base	212 0 26 3748 667 341 current 0 15 122 37 3141 6168	186 1 20 2692 534 168 history1 0 13 121 29 2558 5508	217 2 26 2538 536 151 history2 8 17 155 31 2273 6520
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m	limit/base	212 0 26 3748 667 341 current 0 15 122 37 3141 6168 current	186 1 20 2692 534 168 history1 0 13 121 29 2558 5508 history1	217 2 26 2538 536 151 history2 8 17 155 31 2273 6520 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m	limit/base	212 0 26 3748 667 341 current 0 15 122 37 3141 6168 current 298	186 1 20 2692 534 168 history1 0 13 121 29 2558 5508 history1	217 2 26 2538 536 151 history2 8 17 155 31 2273 6520 history2 76
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	212 0 26 3748 667 341 current 0 15 122 37 3141 6168 current 298 7	186 1 20 2692 534 168 history1 0 13 121 29 2558 5508 history1 634 3	217 2 26 2538 536 151 history2 8 17 155 31 2273 6520 history2 76 4
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDIT	ppm	ASTM D5185m	limit/base limit/base >150 limit/base	212 0 26 3748 667 341 current 0 15 122 37 3141 6168 current 298 7 current	186 1 20 2692 534 168 history1 0 13 121 29 2558 5508 history1 ▲ 634 3 history1	217 2 26 2538 536 151 history2 8 17 155 31 2273 6520 history2 76 4 history2



GREASE ANALYSIS







Laboratory Sample No.

: WC0881144 Lab Number : 06194930 Unique Number : 11057053

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

Tested : 13 Jun 2024 Diagnosed : 13 Jun 2024 - Doug Bogart

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

MANAGUA, ZZ NI 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)

Contact/Location: Rafael Bermudez - EOLOMAN

T:

F: