

GREASE ANALYSIS

Sample Rating Trend

Machine Id

TURBINA 02 - REAR BEARING (S/N 101184) Grease

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

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.

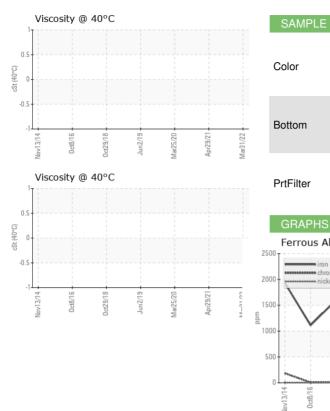
R)		Nov2014 Oct	2016 Oct2018 Jun2019	Mar2020 Apr2021 Mar2022 Aug20	23 May2024	
SAMPLE INFORM	NATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0881135	WC0831520	WC05582721
Sample Date		Client Info		06 May 2024	12 Aug 2023	31 Mar 2022
Machine Age	yrs	Client Info		12	11	0
Grease Age	yrs	Client Info		1	1	6
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	115	76	68
Iron	ppm	ASTM D5185m	>250	630	648	702
Chromium	ppm	ASTM D5185m	>10	76	80	74
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	13	13	10
Tin	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>5	<1	<1	<1
ADDITIVES						
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	limit/base	current 192	history1 205	history2 215
	ppm ppm		limit/base			
Boron		ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	192	205	215
Boron Magnesium	ppm	ASTM D5185m ASTM D5185m	limit/base	192 0	205 0	215 0
Boron Magnesium Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		192 0 10	205 0 7	215 0 8
Boron Magnesium Manganese Molybdenum	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	192 0 10 3793	205 0 7 3398	215 0 8 2798
Boron Magnesium Manganese Molybdenum Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	IImi//base	192 0 10 3793 589	205 0 7 3398 574	215 0 8 2798 487
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	192 0 10 3793 589	205 0 7 3398 574 170	215 0 8 2798 487 117
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		192 0 10 3793 589 293 	205 0 7 3398 574 170	215 0 8 2798 487 117
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		192 0 10 3793 589 293 current	205 0 7 3398 574 170 history1	215 0 8 2798 487 117 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		192 0 10 3793 589 293 current 0	205 0 7 3398 574 170 history1 0	215 0 8 2798 487 117 history2 7
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Zinc Antimony THICKENER/SO/ Aluminum Barium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m		192 0 10 3793 589 293 current 0 14	205 0 7 3398 574 170 history1 0 10	215 0 8 2798 487 117 history2 7 9
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		192 0 10 3793 589 293 current 0 14 154	205 0 7 3398 574 170 <u>history1</u> 0 10 10 115	215 0 8 2798 487 117 history2 7 9 168
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 ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		192 0 10 3793 589 293 current 0 14 154 31	205 0 7 3398 574 170 history1 0 10 115 18	215 0 8 2798 487 117 history2 7 9 168 18
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		192 0 10 3793 589 293 current 0 14 154 31 3206	205 0 7 3398 574 170 history1 0 10 115 18 2853	215 0 8 2798 487 117 history2 7 9 168 18 2214
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base	192 0 10 3793 589 293 current 0 14 154 31 3206 5578	205 0 7 3398 574 170 history1 0 10 115 18 2853 6067	215 0 8 2798 487 117 history2 7 9 168 18 2214 6225
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base	192 0 10 3793 589 293 current 0 14 154 31 3206 5578 current	205 0 7 3398 574 170 history1 0 10 115 18 2853 6067 history1	215 0 8 2798 487 117 history2 7 9 168 18 2214 6225 history2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base	192 0 10 3793 589 293 Current 0 14 154 31 3206 5578 Current 206 6	205 0 7 3398 574 170 history1 0 10 115 18 2853 6067 history1 ∧ 582	215 0 8 2798 487 117 history2 7 9 168 18 2214 6225 history2 45
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SO/ Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base limit/base >150	192 0 10 3793 589 293 Current 0 14 154 31 3206 5578 Current 206 6	205 0 7 3398 574 170 history1 0 10 10 115 18 2853 6067 kistory1 ▲ 582 <1	215 0 8 2798 487 117 history2 7 9 168 18 2214 6225 history2 45 2
Boron Magnesium Manganese Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base limit/base >150 limit/base	192 0 10 3793 589 293 current 0 14 154 31 3206 5578 206 5578 current 206 6	205 0 7 3398 574 170 history1 0 10 10 115 18 2853 6067 18 2853 6067 history1 582 <1	215 0 8 2798 487 117 history2 7 9 168 18 2214 6225 history2 45 2 history2

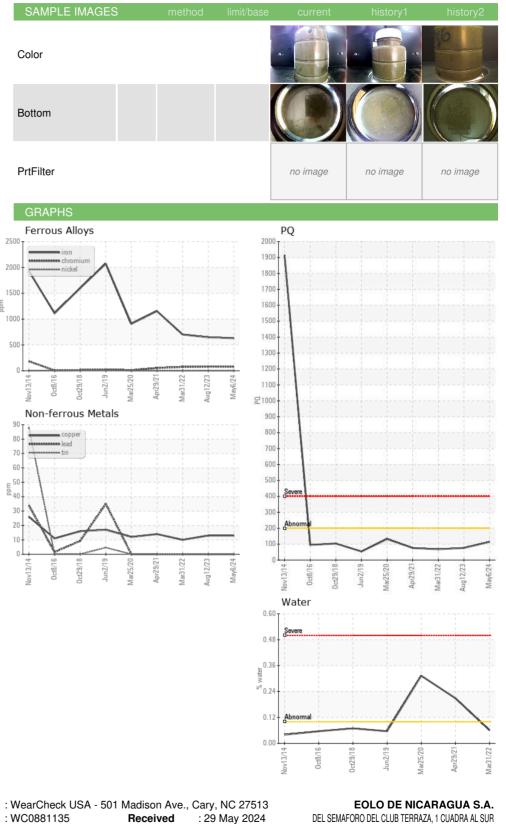


NORMAL



GREASE ANALYSIS





DEL SEMAFORO DEL CLUB TERRAZA, 1 CUADRA AL SUR MANAGUA, ZZ : 13 Jun 2024 - Doug Bogart 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.

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Nov13/14

Dct8/1

* - 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)

Tested

Diagnosed

: 13 Jun 2024

Laboratory

Sample No.

Lab Number : 06194927

Unique Number : 11057050

Contact/Location: Rafael Bermudez - EOLOMAN

T:

F: