

GREASE ANALYSIS

Sample Rating Trend



NORMAL



Machine Id

TURBINA 14 - REAR BEARING (S/N 101296)

Component **Grease**

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

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Recommendation

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

All component wear rates appear stable.

Grease Condition

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

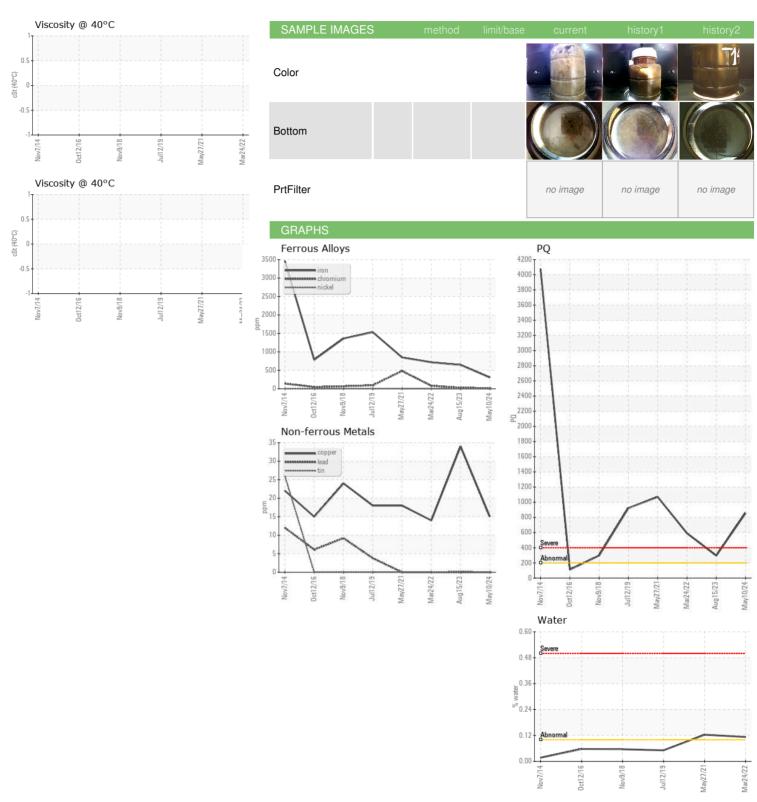
Contaminants

There is no indication of any contamination in the grease.

R)		Nov2014 0	lct2016 Nov2018 Jul201	19 May2021 Mar2022 Aug2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC06194908	WC0505283	WC05582743
Sample Date		Client Info		10 May 2024	15 Aug 2023	24 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				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	856	295	591
Iron	ppm	ASTM D5185m	>250	304	646	717
Chromium	ppm	ASTM D5185m	>10	13	26	81
Nickel	ppm	ASTM D5185m	>5	0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>75	15	34	14
Tin	ppm	ASTM D5185m	>5	0	<1	0
Silver	ppm	ASTM D5185m	>5	0	<1	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		133	174	190
Magnesium	ppm	ASTM D5185m		0	5	2
				<1	0	7
Manganese	ppm	ASTM D5185m		`'	3	,
•	ppm	ASTM D5185m ASTM D5185m		238	367	1192
Molybdenum						
Molybdenum Phosphorus	ppm	ASTM D5185m		238	367	1192
Molybdenum Phosphorus Zinc	ppm ppm	ASTM D5185m ASTM D5185m		238 467	367 323	1192 324
Molybdenum Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	238 467	367 323 217	1192 324 259
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	238 467 32 	367 323 217	1192 324 259
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	238 467 32 current	367 323 217 history1	1192 324 259
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	238 467 32 current	367 323 217 history1	1192 324 259 history2
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base	238 467 32 current 0	367 323 217 history1 3	1192 324 259 history2 5
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	238 467 32 current 0 0 5	367 323 217 history1 3 7 74	1192 324 259 history2 5 14 155
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	238 467 32 current 0 0 5	367 323 217 history1 3 7 74 12	1192 324 259 history2 5 14 155
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	238 467 32 current 0 0 5 <1 144	367 323 217 history1 3 7 74 12 798	1192 324 259 history2 5 14 155 17 1601
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m		238 467 32 current 0 0 5 <1 144 3890	367 323 217 history1 3 7 74 12 798 5159	1192 324 259 history2 5 14 155 17 1601 5499
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	238 467 32 current 0 0 5 <1 144 3890 current	367 323 217 history1 3 7 74 12 798 5159 history1	1192 324 259 history2 5 14 155 17 1601 5499 history2
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base	238 467 32 current 0 0 5 <1 144 3890 current 455	367 323 217 history1 3 7 74 12 798 5159 history1 ▲ 452	1192 324 259 history2 5 14 155 17 1601 5499 history2 25
Molybdenum Phosphorus Zinc Antimony THICKENER/SOA Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDI	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	limit/base >150	238 467 32 current 0 0 5 <1 144 3890 current 455 <1	367 323 217 history1 3 7 74 12 798 5159 history1 ▲ 452 1	1192 324 259 history2 5 14 155 17 1601 5499 history2 25 3
Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m Method	limit/base >150	238 467 32 current 0 0 5 <1 144 3890 current 455 <1 current	367 323 217 history1 3 7 74 12 798 5159 history1 ▲ 452 1 history1	1192 324 259 history2 5 14 155 17 1601 5499 history2 25 3



GREASE ANALYSIS







Certificate 12367

Laboratory Sample No.

: WC06194908 Lab Number : 06194908 Unique Number : 11057031

: 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

Contact: Rafael Bermudez

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

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Report Id: EOLOMAN [WUSCAR] 06194908 (Generated: 06/15/2024 09:04:34) Rev: 1

Contact/Location: Rafael Bermudez - EOLOMAN

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