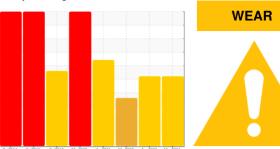


GREASE ANALYSIS

Sample Rating Trend



Machine Id

TURBINA 01 - FRONT BEARING

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.

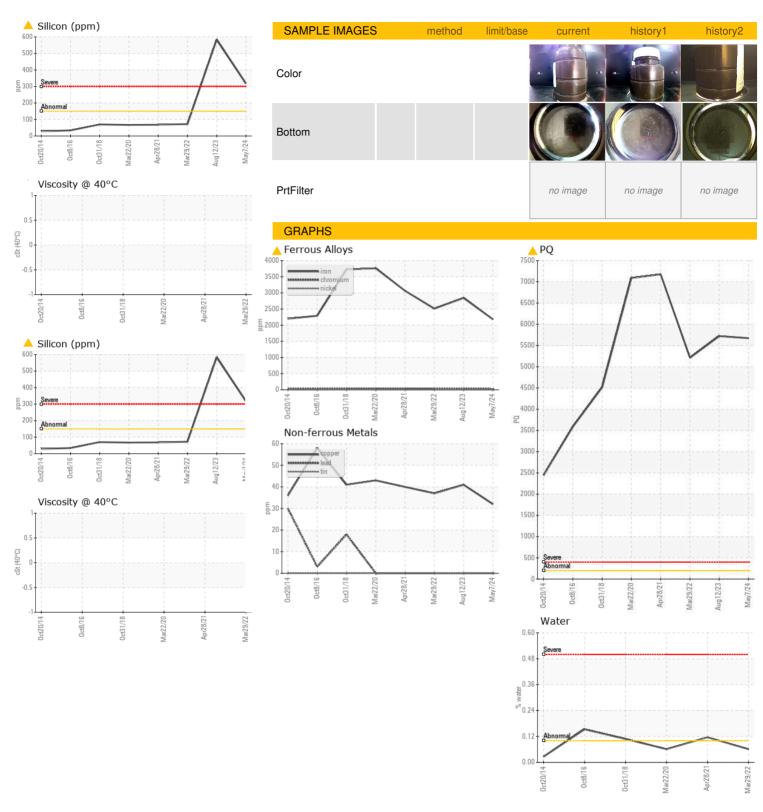
Contaminants

There is no indication of any contamination in the grease.

H)		0ct2014 (0ct2016 0ct2018 Mar202	0 Apr2021 Mar2022 Aug2023		
SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0881131	WC0505281	WC05582757
Sample Date		Client Info		07 May 2024	12 Aug 2023	29 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	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	▲ 5673	<u></u> 5721	<u></u> 5212
Iron	ppm	ASTM D5185m	>250	<u> </u>	<u>\$\times\$</u> 2843	<u>^</u> 2514
Chromium	ppm	ASTM D5185m	>10	<u> </u>	<u>^</u> 27	<u> </u>
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		1	1	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>75	32	41	37
Tin	ppm	ASTM D5185m	>5	0	0	0
Silver	ppm	ASTM D5185m	>5	<1	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		178	230	190
Magnesium	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		14	18	17
Molybdenum	ppm	ASTM D5185m		2894	3471	2420
Phosphorus	ppm	ASTM D5185m		498	598	371
Zinc	ppm	ASTM D5185m		233	198	131
Antimony	ppm	ASTM D5185m				
THICKENER/SO						
	4P	method	limit/base	current	history1	history2
Aluminum	AP ppm	method ASTM D5185m	limit/base	current 0	history1	history2 7
			limit/base			
Aluminum	ppm	ASTM D5185m	limit/base	0	0	7
Aluminum Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	0 7	0	7
Aluminum Barium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 7 93	0 9 124	7 7 137
Aluminum Barium Calcium Sodium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 7 93 21	0 9 124 18	7 7 137 16
Aluminum Barium Calcium Sodium Lithium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 7 93 21 2378	0 9 124 18 2903	7 7 137 16 2081
Aluminum Barium Calcium Sodium Lithium Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 7 93 21 2378 5167	0 9 124 18 2903 6801	7 7 137 16 2081 5604
Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	limit/base	0 7 93 21 2378 5167 current	0 9 124 18 2903 6801 history1	7 7 137 16 2081 5604 history2
Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MSTM D5185m MSTM D5185m MSTM D5185m	limit/base	0 7 93 21 2378 5167 current	0 9 124 18 2903 6801 history1 ▲ 584	7 7 137 16 2081 5604 history2
Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	limit/base >150	0 7 93 21 2378 5167 current ▲ 318	0 9 124 18 2903 6801 history1 ▲ 584	7 7 137 16 2081 5604 history2 72 2
Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDI	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m METHOD ASTM D5185m Method ASTM D5185m ASTM D5185m Method	limit/base >150 limit/base	0 7 93 21 2378 5167 current ▲ 318 5 current Brown	0 9 124 18 2903 6801 history1 ▲ 584 2	7 7 137 16 2081 5604 history2 72 2 history2
Aluminum Barium Calcium Sodium Lithium Sulfur CONTAMINANTS Silicon Potassium GREASE CONDI	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m MEthod ASTM D5185m Method *Visual	limit/base >150 limit/base	0 7 93 21 2378 5167 current 318 5	0 9 124 18 2903 6801 history1 ▲ 584 2 history1	7 7 137 16 2081 5604 history2 72 2 history2



GREASE ANALYSIS







Certificate 12367

Sample No.

Laboratory

: WC0881131

Lab Number : 06194897 Unique Number : 11057020

: 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

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)

Report Id: EOLOMAN [WUSCAR] 06194897 (Generated: 06/15/2024 04:53:19) Rev: 2

Contact/Location: Rafael Bermudez - EOLOMAN

Contact: Rafael Bermudez

NI

T:

F: