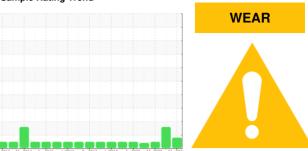


# **GREASE ANALYSIS**

Sample Rating Trend



Machine Id

# **TURBINA 18 (S/N 101292)**

Wind Turbine Gearbox

**FUCHS RENOLIN UNISYN CLP 320 (340 LTR)** 

### **DIAGNOSIS**

### Recommendation

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

The iron level is abnormal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

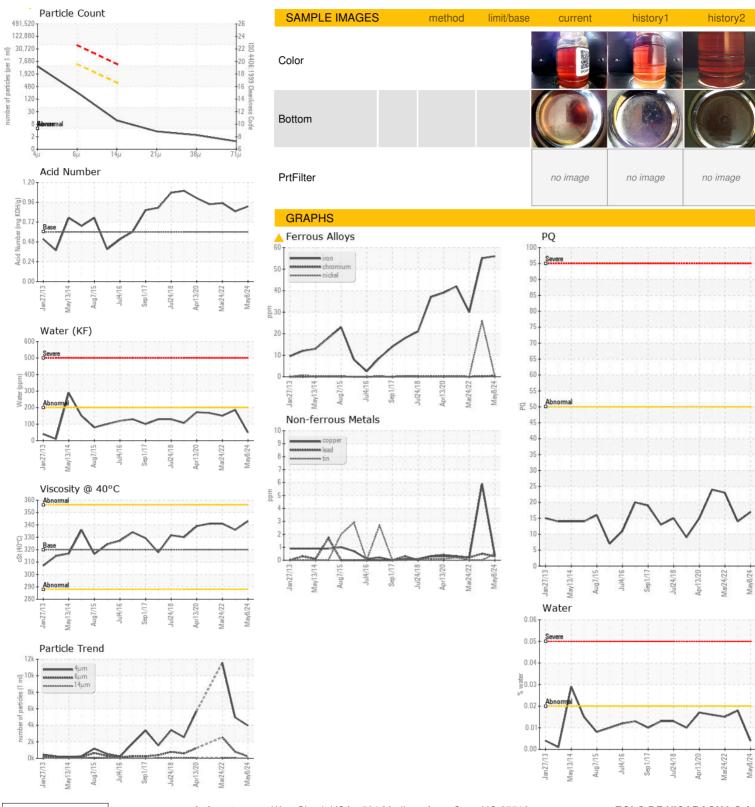
### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

11)						
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0881118	WC0505291	WC05582419
Sample Date		Client Info		08 May 2024	22 Aug 2023	24 Mar 2022
Machine Age	yrs	Client Info		12	11	72
Oil Age	yrs	Client Info		9	7	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	17	14	23
Iron	ppm	ASTM D5185m	>30	<b>△</b> 56	<b>△</b> 55	30
Chromium	ppm	ASTM D5185m	>3	<1	<1	0
Nickel	ppm	ASTM D5185m	>3	<1	<u>^</u> 26	0
Cadmium	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Lead	ppm	ASTM D5185m	>15	<1	<1	<1
Copper	ppm	ASTM D5185m	>10	<1	6	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m		<1	<1	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Molybdenum	ppm	ASTM D5185m		<1	0	0
Phosphorus	ppm	ASTM D5185m		181	179	125
Zinc	ppm	ASTM D5185m		144	88	56
Antimony	ppm	ASTM D5185m				
THICKENER/SOA	ιP	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m		1	0	<1
Barium	ppm	ASTM D5185m		1	2	0
Calcium	ppm	ASTM D5185m		5	2	2
Sodium	ppm	ASTM D5185m		2	0	<1
Sulfur	ppm	ASTM D5185m		4489	5148	3775
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+15	1	5	<1
Potassium	ppm	ASTM D5185m		<1	<1	0
Motor	%	ASTM D6304	>0.02	0.004	0.010	0.015
Water	70	A3 11VI D0304	>0.02	0.004	0.018	0.015



## **GREASE ANALYSIS**







Certificate 12367

Laboratory Sample No.

: WC0881118 Lab Number : 06194661 Unique Number : 11056784

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received : 29 May 2024 **Tested** : 31 May 2024

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

Diagnosed : 31 May 2024 - Angela Borella Test Package : GRS 1 (Additional Tests: Consistency, FilterPatch, GreaseColor, ICP, KF, KV40, PQ, PrtCount, Confident Rafael Bermudez

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)

NI

T:

F: