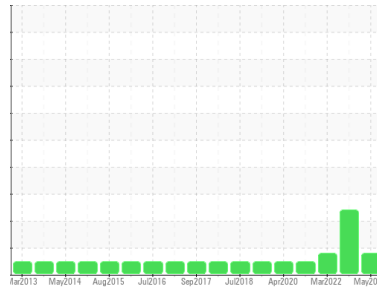




GREASE ANALYSIS

Sample Rating Trend



WEAR



Machine Id
TURBINA 20 (S/N 101181)

Component
Wind Turbine Gearbox

Fluid
FUCHS RENOLIN UNISYN CLP 320 (320 LTR)

DIAGNOSIS

▲ Recommendation

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

▲ Wear

The iron level is abnormal. All other component wear rates are normal.

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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0881140	WC0505299	WC05582420
Sample Date	Client Info			04 May 2024	23 Aug 2023	30 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	ATTENTION

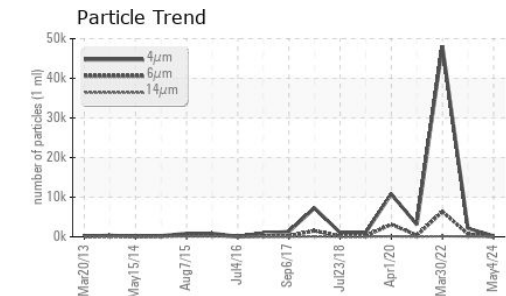
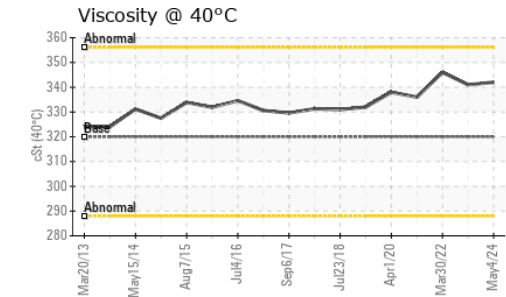
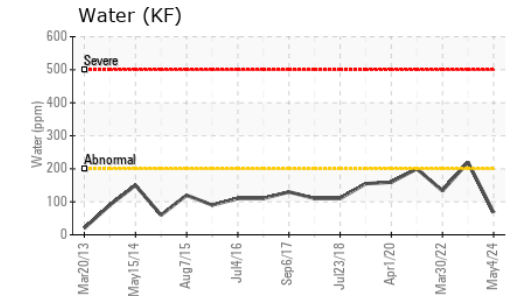
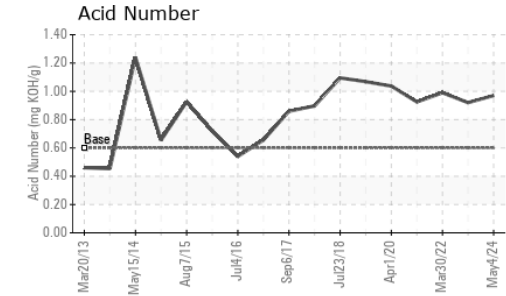
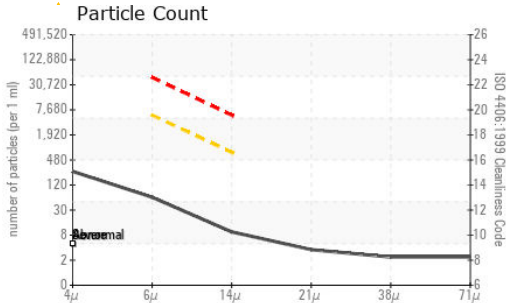
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	15	11	22
Iron	ppm	ASTM D5185m	>30	▲ 43	▲ 43	22
Chromium	ppm	ASTM D5185m	>3	<1	<1	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Lead	ppm	ASTM D5185m	>15	<1	0	<1
Copper	ppm	ASTM D5185m	>10	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		<1	<1	0
Manganese	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Phosphorus	ppm	ASTM D5185m		174	168	124
Zinc	ppm	ASTM D5185m		85	83	64
Antimony	ppm	ASTM D5185m		---	---	---

THICKENER/SOAP		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m		1	0	<1
Barium	ppm	ASTM D5185m		1	2	0
Calcium	ppm	ASTM D5185m		8	5	4
Sodium	ppm	ASTM D5185m		3	0	1
Sulfur	ppm	ASTM D5185m		4254	4655	3410

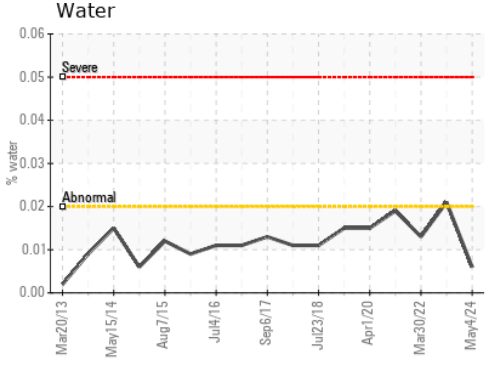
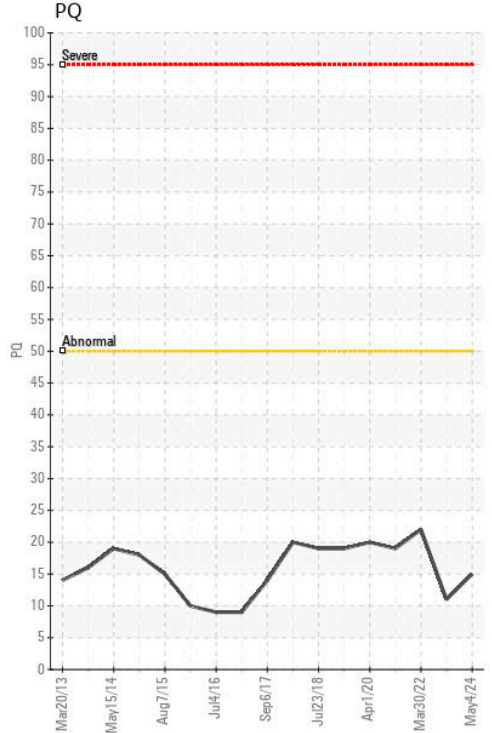
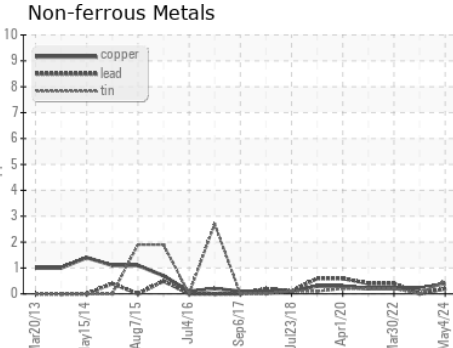
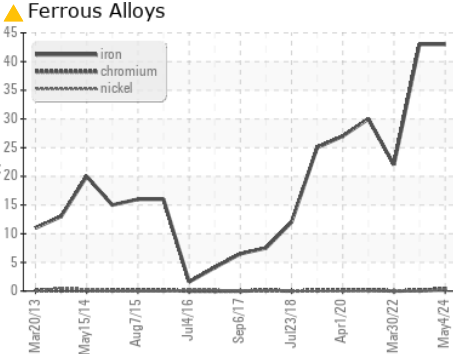
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+15	1	1	<1
Potassium	ppm	ASTM D5185m		2	<1	0
Water	%	ASTM D6304	>0.02	0.006	▲ 0.021	0.013
ppm Water	ppm	ASTM D6304	>200	68	▲ 219.4	133.3

GREASE ANALYSIS



SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter			no image	no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0881140 **Received** : 29 May 2024
Lab Number : 06194671 **Tested** : 31 May 2024
Unique Number : 11056794 **Diagnosed** : 31 May 2024 - Angela Borella
Test Package : GRS 1 (Additional Tests: Consistency, FilterPatch, GreaseColor, ICP, KF, KV40, PQ, PrtCount, SORFEN)
 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)