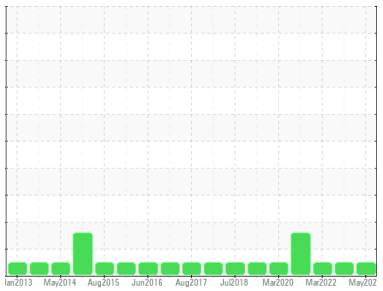
GREASE ANALYSIS

Sample Rating Trend



NORMAL

Machine Id
TURBINA 02 (S/N 101184)
Component
Wind Turbine Gearbox
Fluid
FUCHS RENOLIN UNISYN CLP 320 (320 LTR)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is 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		**WC0881137**	WC0505305	WC05582413
Sample Date		Client Info		**06 May 2024**	12 Aug 2023	31 Mar 2022
Machine Age	yrs	Client Info		**2**	11	72
Oil Age	yrs	Client Info		**2**	1	0
Oil Changed		Client Info		**N/A**	Changed	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	**15**	11	22
Iron	ppm	ASTM D5185m	>30	**16**	12	29
Chromium	ppm	ASTM D5185m	>3	**<1**	0	<1
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**	1	<1
Copper	ppm	ASTM D5185m	>10	**<1**	<1	<1
Tin	ppm	ASTM D5185m	>10	**<1**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0

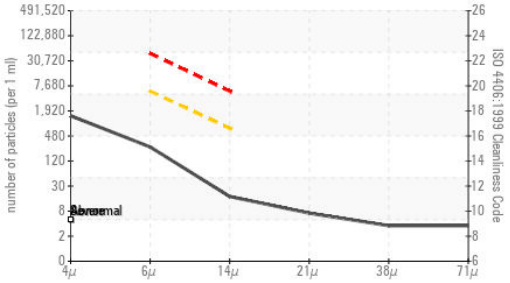
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m		**<1**	<1	<1
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Molybdenum	ppm	ASTM D5185m		**<1**	0	0
Phosphorus	ppm	ASTM D5185m		**192**	193	180
Zinc	ppm	ASTM D5185m		**63**	20	194
Antimony	ppm	ASTM D5185m		**---**	---	---

THICKENER/SOAP		method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m		**1**	0	<1
Barium	ppm	ASTM D5185m		**4**	4	0
Calcium	ppm	ASTM D5185m		**13**	8	10
Sodium	ppm	ASTM D5185m		**3**	5	3
Sulfur	ppm	ASTM D5185m		**5058**	6740	4025

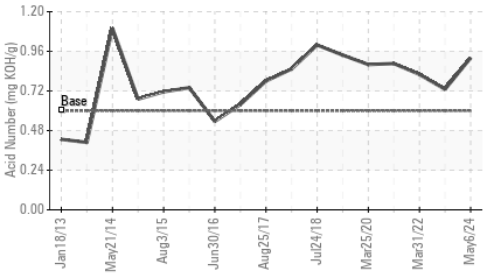
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+15	**2**	6	<1
Potassium	ppm	ASTM D5185m		**2**	<1	<1
Water	%	ASTM D6304	>0.02	**0.005**	0.013	0.019
ppm Water	ppm	ASTM D6304	>200	**57**	137.1	194.8

GREASE ANALYSIS

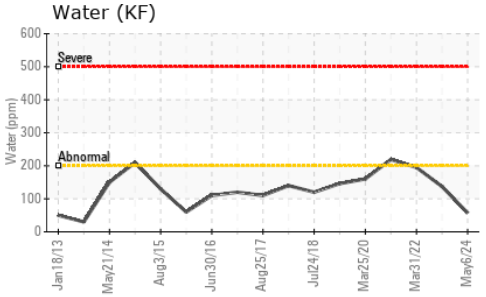
Particle Count



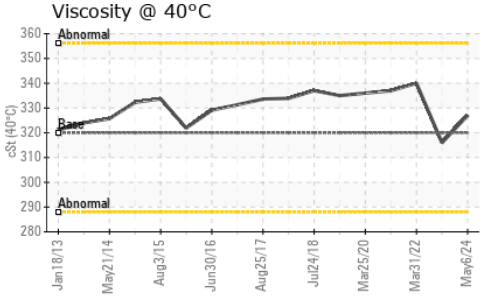
Acid Number



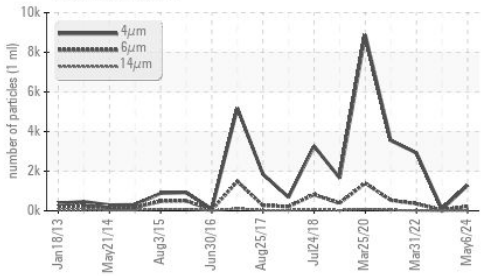
Water (KF)



Viscosity @ 40°C



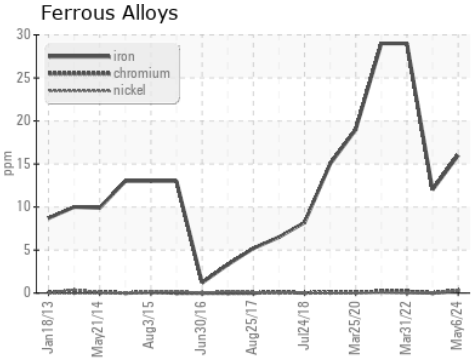
Particle Trend



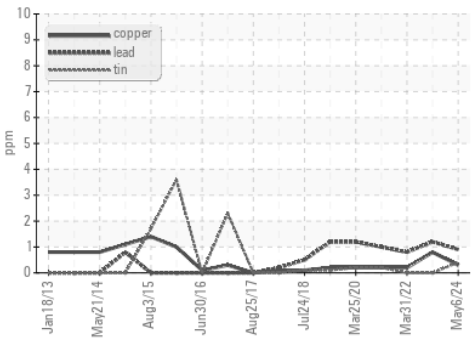
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter			*no image*	*no image*	*no image*

GRAPHS

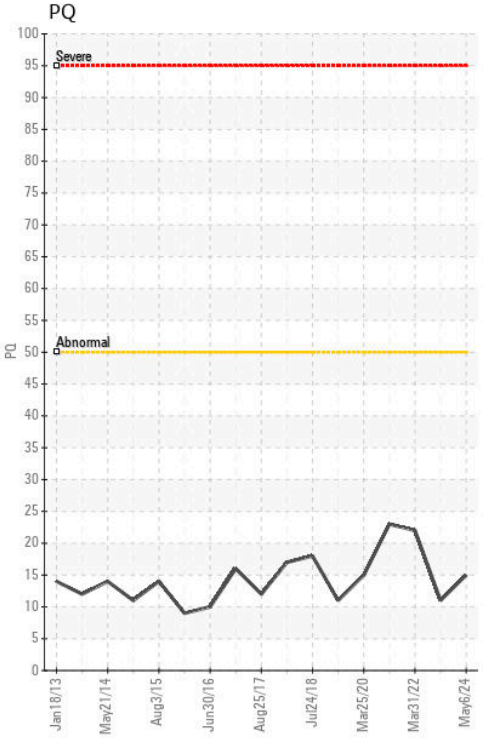
Ferrous Alloys



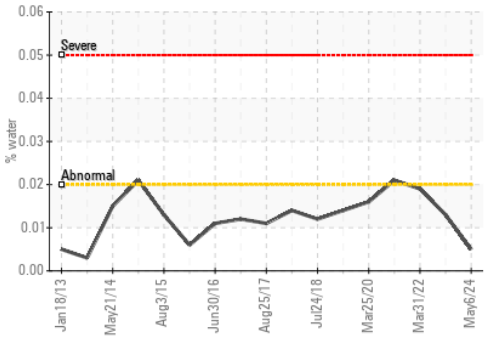
Non-ferrous Metals



PQ



Water



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0881137
Lab Number : 06194665
Unique Number : 11056788
Test Package : GRS 1 (Additional Tests: Consistency, FilterPatch, GreaseColor, ICP, KF, KV40, PQ, PrtCount, SCREEN)

Received : 29 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Angela Borella

EOLO DE NICARAGUA S.A.
DEL SEMAFORO DEL CLUB TERRAZA, 1 CUADRA AL SUR
MANAGUA, ZZ
NI
Contact: Rafael Bermudez
T:
F:

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)