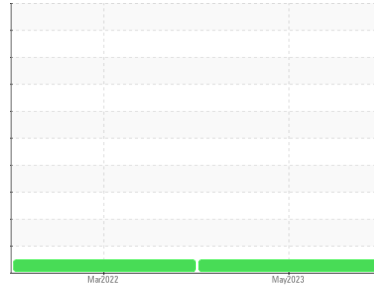




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**PRIDDY [200005313]**  
 Machine Id  
**29WEA88864 (S/N EWP-02973)**  
 Component  
**Wind Turbine Gearbox**  
 Fluid  
**FUCHS RENOLIN CLP ISO 320 (--- LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All 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	history 1	history 2
Sample Number	Client Info			<b>NX010243</b>	NX05593192	---
Sample Date	Client Info			<b>31 May 2023</b>	09 Mar 2022	---
Machine Age	hrs	Client Info		<b>13222</b>	1940	---
Oil Age	hrs	Client Info		<b>0</b>	1940	---
Oil Changed	Client Info			<b>N/A</b>	Not Changd	---
Sample Status				<b>NORMAL</b>	NORMAL	---

WEAR METALS		method	limit/base	current	history 1	history 2
PQ		ASTM D8184	>80	<b>9</b>	21	---
Iron	ppm	ASTM D5185m	>150	<b>15</b>	6	---
Chromium	ppm	ASTM D5185m	>5	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	<1	---
Titanium	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Silver	ppm	ASTM D5185m		<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m	>20	<b>2</b>	1	---
Copper	ppm	ASTM D5185m	>50	<b>0</b>	<1	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		<b>6</b>	7	---
Barium	ppm	ASTM D5185m		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	---
Calcium	ppm	ASTM D5185m		<b>24</b>	20	---
Phosphorus	ppm	ASTM D5185m		<b>222</b>	217	---
Zinc	ppm	ASTM D5185m		<b>0</b>	0	---
Sulfur	ppm	ASTM D5185m		<b>6467</b>	5145	---

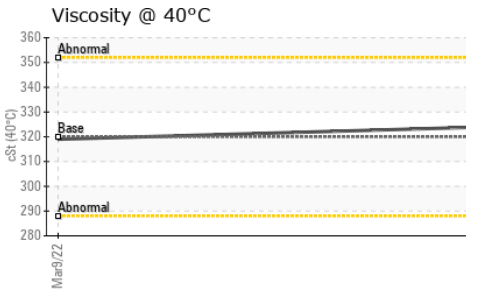
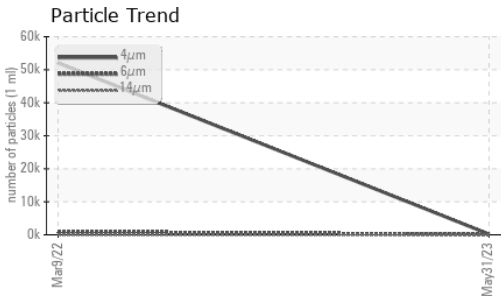
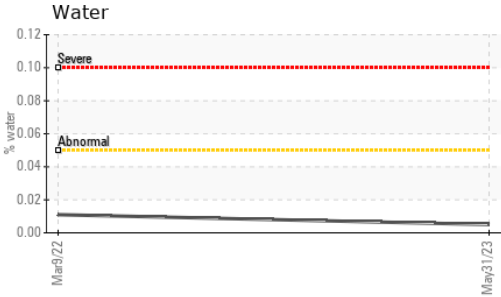
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>50	<b>2</b>	4	---
Sodium	ppm	ASTM D5185m	>20	<b>3</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	<1	---
Water	%	ASTM D6304	>0.05	<b>0.005</b>	0.011	---
ppm Water	ppm	ASTM D6304	>500	<b>58.4</b>	114.4	---

FLUID CLEANLINESS		method	limit/base	current	history 1	history 2
Particles >4µm		ASTM D7647		<b>189</b>	52049	---
Particles >6µm		ASTM D7647	>2500	<b>53</b>	931	---
Particles >14µm		ASTM D7647	>320	<b>10</b>	10	---
Particles >21µm		ASTM D7647	>80	<b>3</b>	4	---
Particles >38µm		ASTM D7647	>20	<b>1</b>	0	---
Particles >71µm		ASTM D7647	>4	<b>1</b>	0	---
Oil Cleanliness		ISO 4406 (c)	>--/18/15	<b>15/13/10</b>	23/17/10	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.36</b>	0.41	---



# OIL ANALYSIS REPORT



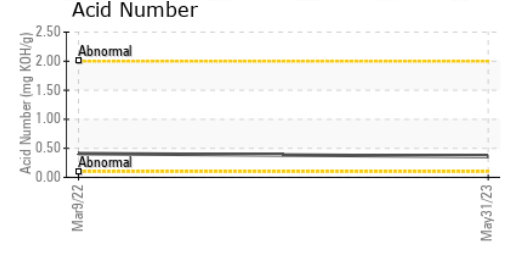
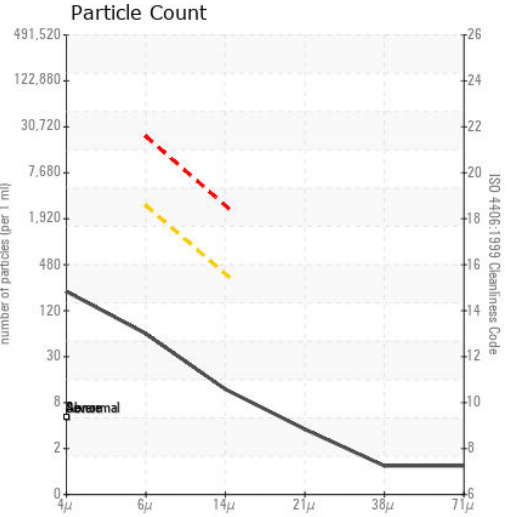
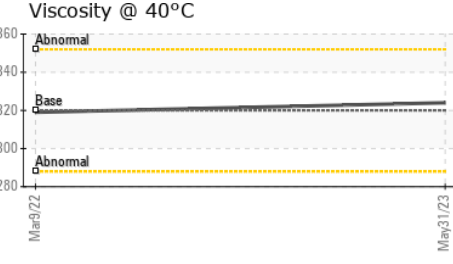
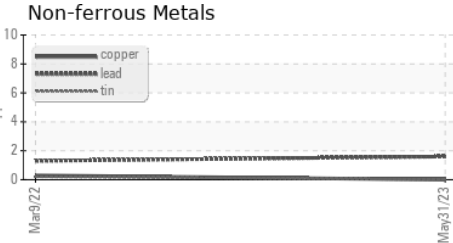
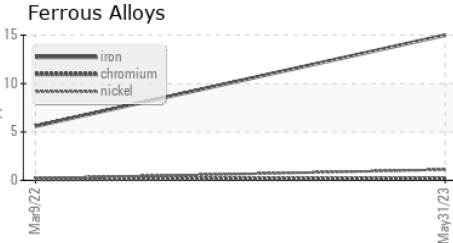
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 320	<b>324</b>	319	---

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : NX010243 **Received** : 22 Jun 2023  
**Lab Number** : 05881447 **Diagnosed** : 30 Jun 2023  
**Unique Number** : 10526550 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PQ, PrtCount )

**NORDEX USA - Chicago**  
 300 SOUTH WACKER DRIVE, SUITE 1500  
 CHICAGO, IL  
 US 60606  
 Contact: DEVIN LINEHAN  
 DLinehan@nordex-online.com  
 T: (312)386-4124  
 F: (312)386-7102

Certificate L2367  
 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)