



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**EL SAUZ**  
 Machine Id  
**G03WEA90040 (S/N W-122969)**  
 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	history1	history2
Sample Number	Client Info		<b>NX014524</b>	---	---
Sample Date	Client Info		<b>04 Aug 2023</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>N/A</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184	>80	<b>12</b>	---	---
Iron	ppm	ASTM D5185m	>150	<b>23</b>	---
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---
Titanium	ppm	ASTM D5185m	>10	<b>0</b>	---
Silver	ppm	ASTM D5185m		<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---
Lead	ppm	ASTM D5185m	>20	<b>1</b>	---
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	---
Tin	ppm	ASTM D5185m	>3	<b>0</b>	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>1</b>	---
Barium	ppm	ASTM D5185m		<b>0</b>	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Calcium	ppm	ASTM D5185m		<b>16</b>	---
Phosphorus	ppm	ASTM D5185m		<b>211</b>	---
Zinc	ppm	ASTM D5185m		<b>5</b>	---
Sulfur	ppm	ASTM D5185m		<b>4888</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>7</b>	---
Sodium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	---
Water	%	ASTM D6304	>0.05	<b>0.003</b>	---
ppm Water	ppm	ASTM D6304	>500	<b>31.9</b>	---

## FLUID CLEANLINESS

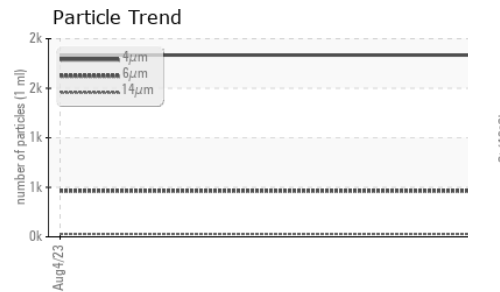
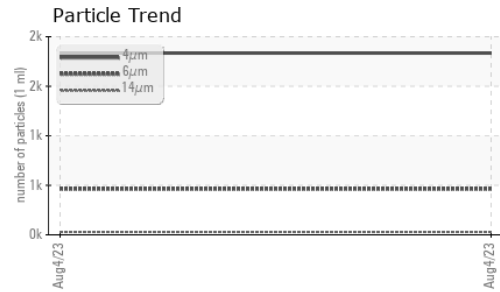
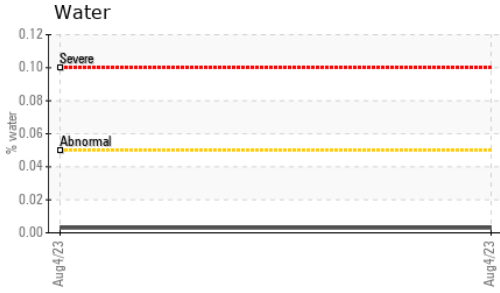
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>1835</b>	---	---
Particles >6µm	ASTM D7647	>2500	<b>464</b>	---	---
Particles >14µm	ASTM D7647	>320	<b>29</b>	---	---
Particles >21µm	ASTM D7647	>80	<b>7</b>	---	---
Particles >38µm	ASTM D7647	>20	<b>2</b>	---	---
Particles >71µm	ASTM D7647	>4	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/18/15	<b>18/16/12</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.32</b>	---



# OIL ANALYSIS REPORT



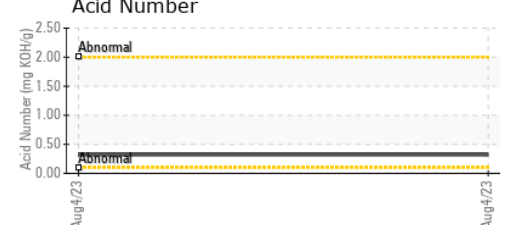
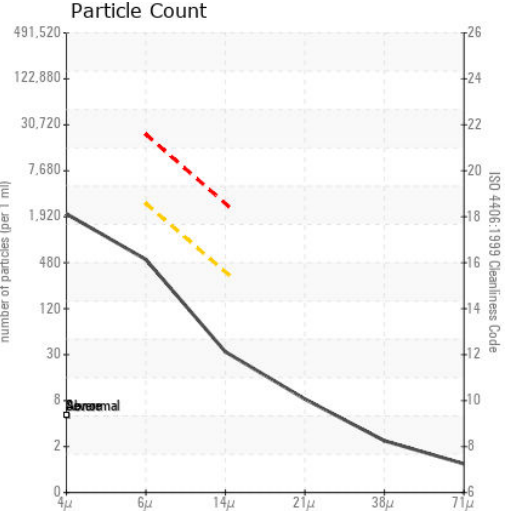
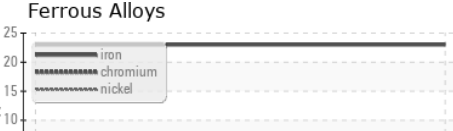
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	323	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : NX014524 Received : 15 Aug 2023  
 Lab Number : 05924851 Diagnosed : 18 Aug 2023  
 Unique Number : 10604798 Diagnostician : Don Baldrige  
 Test Package : IND 2 ( Additional Tests: KF, PQ, PrtCount )

**NORDEX USA - Chicago**  
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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)