



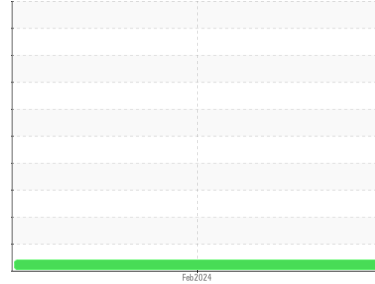
# OIL ANALYSIS REPORT

Sample Rating Trend

VIS DEBRIS

Area  
**MAGENTA NTX**  
Machine Id  
**09WEA91120**

Component  
**Wind Turbine Gearbox**  
Fluid  
**SHELL OMALA S5 WIND 320 (--- LTR)**



## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris present in the oil.

### 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>NX012270</b>	---	---
Sample Date	Client Info	<b>21 Feb 2024</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>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184 >50	<b>18</b>	---	---
Iron	ppm ASTM D5185m >30	<b>29</b>	---	---
Chromium	ppm ASTM D5185m >3	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185m >3	<b>0</b>	---	---
Titanium	ppm ASTM D5185m >10	<b>0</b>	---	---
Silver	ppm ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >30	<b>0</b>	---	---
Lead	ppm ASTM D5185m >15	<b>0</b>	---	---
Copper	ppm ASTM D5185m >10	<b>1</b>	---	---
Tin	ppm ASTM D5185m >10	<b>&lt;1</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>0</b>	---	---
Barium	ppm ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Manganese	ppm ASTM D5185m	<b>1</b>	---	---
Magnesium	ppm ASTM D5185m	<b>0</b>	---	---
Calcium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Phosphorus	ppm ASTM D5185m	<b>487</b>	---	---
Zinc	ppm ASTM D5185m	<b>4</b>	---	---
Sulfur	ppm ASTM D5185m	<b>3989</b>	---	---

## CONTAMINANTS

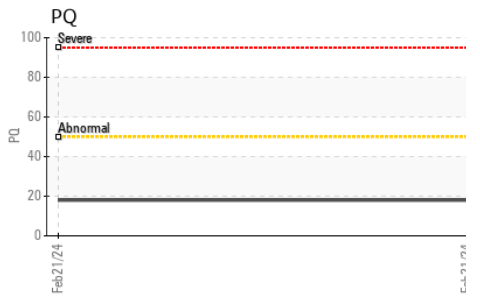
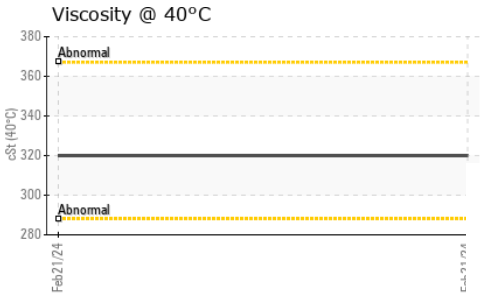
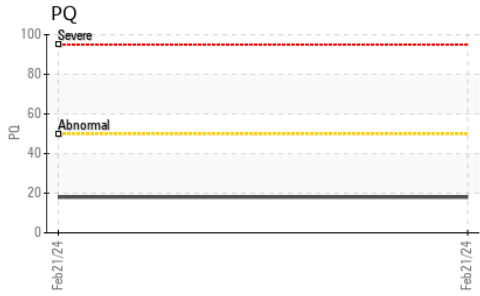
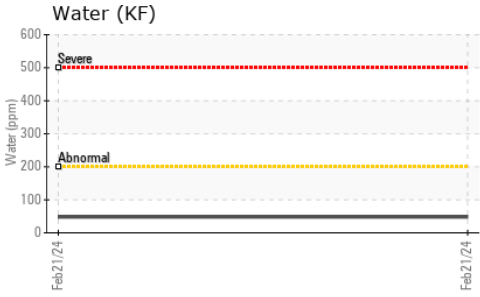
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+15	<b>6</b>	---	---
Sodium	ppm ASTM D5185m	<b>2</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>0</b>	---	---
Water	% ASTM D6304 >0.02	<b>0.004</b>	---	---
ppm Water	ppm ASTM D6304 >200	<b>48</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.99</b>	---	---



# OIL ANALYSIS REPORT



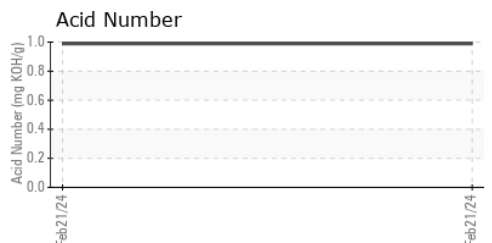
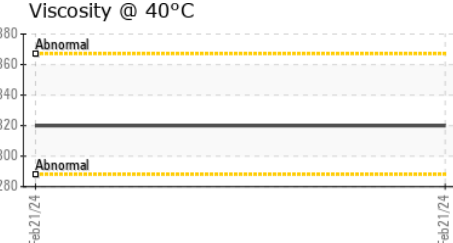
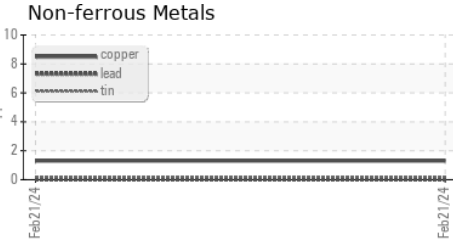
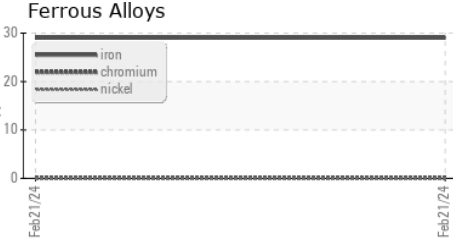
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	▲ MODER	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.02	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	---	---

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

## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : NX012270  
 Lab Number : 06125623  
 Unique Number : 10939774  
 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)