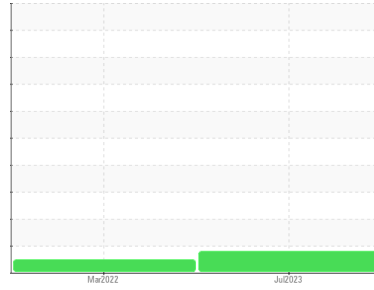




PROBLEM SUMMARY

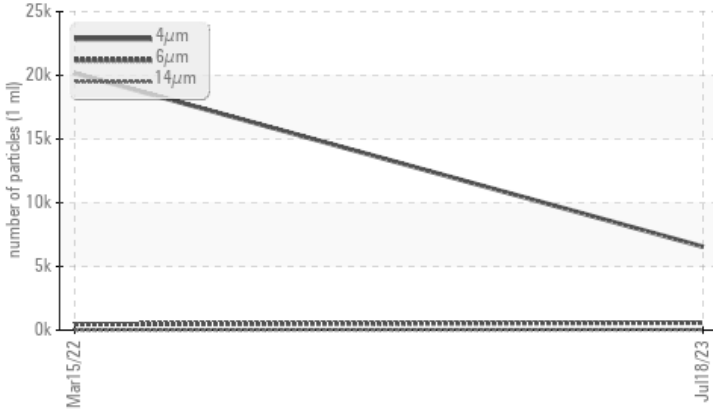
Area
PRIDDY [200005313]
 Machine Id
88838 - H4
 Component
Wind Turbine Gearbox
 Fluid
FUCHS RENOLIN UNISYN CLP 320 (--- LTR)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			ATTENTION	NORMAL	---
Particles >6µm	ASTM D7647	>320	▲ 580	464	---
Oil Cleanliness	ISO 4406 (c)	>--/15/12	▲ 20/16/12	22/16/11	---

Customer Id: NORDEX
 Sample No.: NX010213
 Lab Number: 05933567
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

15 Mar 2022 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

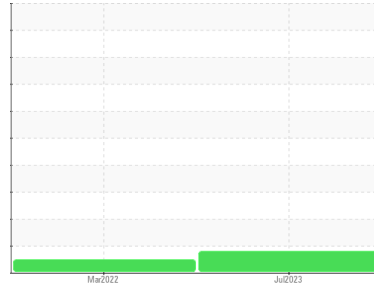
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
PRIDDY [200005313]
 Machine Id
88838 - H4

Component
Wind Turbine Gearbox
 Fluid
FUCHS RENOLIN UNISYN CLP 320 (--- LTR)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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		NX010213	NX05593181	---
Sample Date	Client Info		18 Jul 2023	15 Mar 2022	---
Machine Age	hrs	Client Info	11205	1804	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		N/A	N/A	---
Sample Status			ATTENTION	NORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184	>50	16	20	---
Iron	ppm	ASTM D5185m	>30	14	4
Chromium	ppm	ASTM D5185m	>3	0	0
Nickel	ppm	ASTM D5185m	>3	0	<1
Titanium	ppm	ASTM D5185m	>10	0	0
Silver	ppm	ASTM D5185m		0	<1
Aluminum	ppm	ASTM D5185m	>30	0	<1
Lead	ppm	ASTM D5185m	>15	2	2
Copper	ppm	ASTM D5185m	>10	<1	<1
Tin	ppm	ASTM D5185m	>10	0	<1
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		8	8
Barium	ppm	ASTM D5185m		2	0
Molybdenum	ppm	ASTM D5185m		0	<1
Manganese	ppm	ASTM D5185m		<1	0
Magnesium	ppm	ASTM D5185m		<1	0
Calcium	ppm	ASTM D5185m		24	18
Phosphorus	ppm	ASTM D5185m		208	200
Zinc	ppm	ASTM D5185m		6	0
Sulfur	ppm	ASTM D5185m		5051	4809

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+15	5	4
Sodium	ppm	ASTM D5185m		0	1
Potassium	ppm	ASTM D5185m	>20	2	<1
Water	%	ASTM D6304	>0.02	0.013	0.011
ppm Water	ppm	ASTM D6304	>200	132.4	118.2

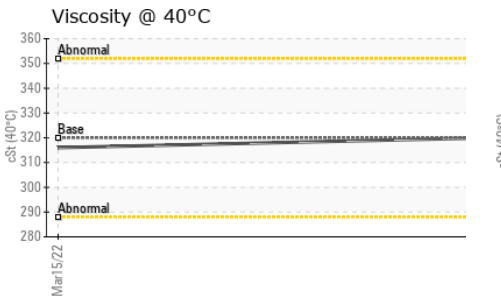
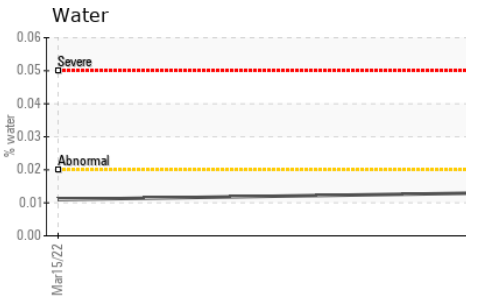
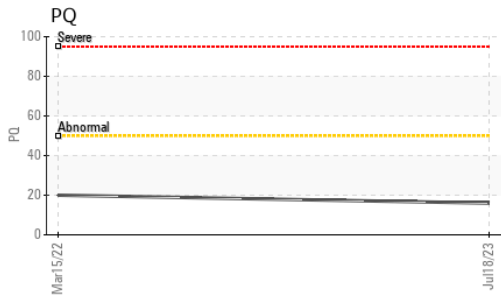
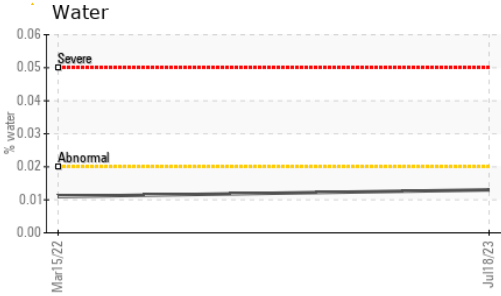
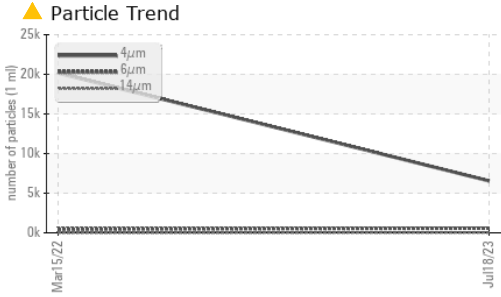
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		6549	20163	---
Particles >6µm	ASTM D7647	>320	580	464	---
Particles >14µm	ASTM D7647	>40	35	12	---
Particles >21µm	ASTM D7647	>10	9	4	---
Particles >38µm	ASTM D7647	>3	1	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>--/15/12	20/16/12	22/16/11	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.6	0.34	0.41

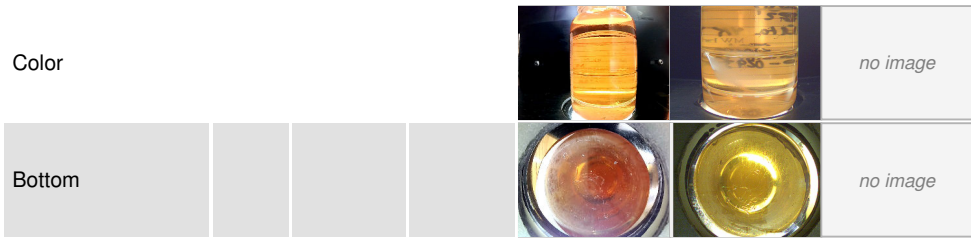
OIL ANALYSIS REPORT



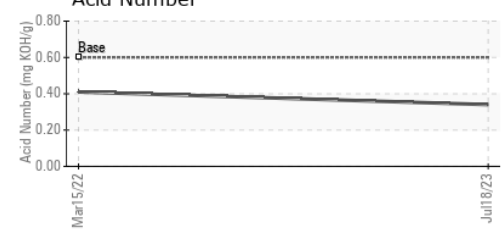
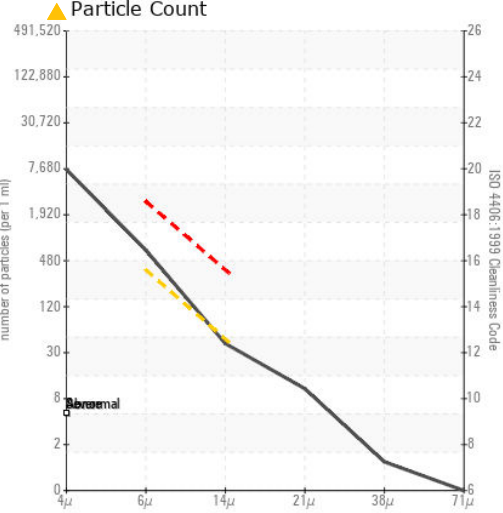
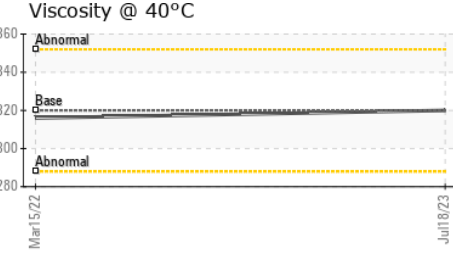
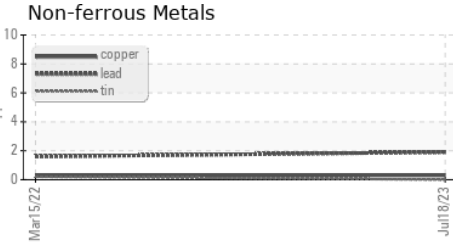
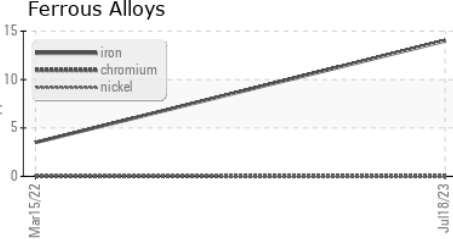
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	316	---

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : NX010213 **Received** : 24 Aug 2023
Lab Number : 05933567 **Diagnosed** : 25 Aug 2023
Unique Number : 10618838 **Diagnostician** : Don Baldrige
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)