

OIL ANALYSIS REPORT

Area INDIANA CROSSROADS II [200008339] T10 (S/N W-124523)

Wind Turbine Gearbox

Fluid FUCHS RENOLIN CLP ISO 320 (--- LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

Wear

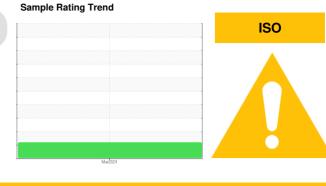
All component wear rates are normal.

Contamination

There is a high 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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		NX06151081		
Sample Date		Client Info		07 Mar 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>80	20		
Iron	ppm	ASTM D5185m	>150	12		
Chromium	ppm	ASTM D5185m	>5	0		
Nickel	ppm		>10	<1		
Titanium	ppm	ASTM D5185m	>10	0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	۰ <1		
Lead	ppm	ASTM D5185m	>20	<1		
Copper	ppm	ASTM D5185m	>20 >50	2		
Tin		ASTM D5185m	>3	2 <1		
Vanadium	ppm	ASTM D5185m	<i>></i> 0	<1		
	ppm			-		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		8		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		2		
Magnesium	ppm	ASTM D5185m		1		
Calcium	ppm	ASTM D5185m		23		
Phosphorus	ppm	ASTM D5185m		236		
Zinc	ppm	ASTM D5185m		0		
Sulfur	ppm	ASTM D5185m		6373		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	5		
Sodium	ppm	ASTM D5185m	>20	4		
Potassium	ppm	ASTM D5185m	>20	3		
Water	%	ASTM D6304	>0.05	0.001		
ppm Water	ppm	ASTM D6304	>500	6		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	6 58108		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>160	15		
Particles >21µm		ASTM D7647	>40	2		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Particles >/1µm Oil Cleanliness			>3 >19/17/14	0 2 3/19/11		

Acid Number (AN)

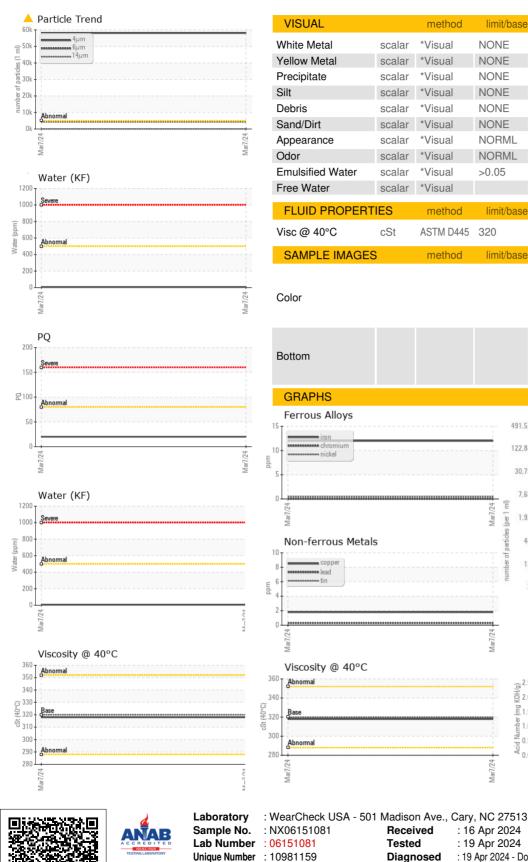
Report Id: NORDEX [WUSCAR] 06151081 (Generated: 04/19/2024 23:06:20) Rev: 2

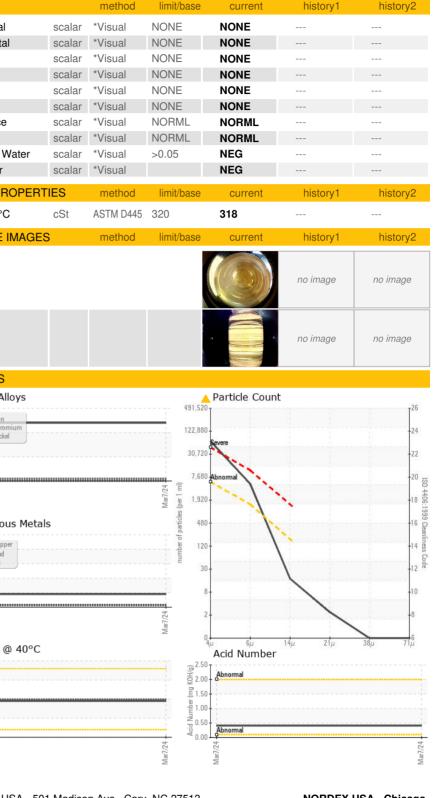
mg KOH/g ASTM D8045

0.41 Contact/Location: DEVIN LINEHAN - NORDEX



OIL ANALYSIS REPORT





: 16 Apr 2024

: 19 Apr 2024

Test Package : IND 2 (Additional Tests: KF, PQ, PrtCount)

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.



NORDEX USA - Chicago 300 SOUTH WACKER DRIVE, SUITE 1500 CHICAGO, IL : 19 Apr 2024 - Don Baldridge US 60606 Contact: DEVIN LINEHAN DLinehan@nordex-online.com T: (312)386-4124 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (312)386-7102

Report Id: NORDEX [WUSCAR] 06151081 (Generated: 04/19/2024 23:06:20) Rev: 2

Certificate 12367

Contact/Location: DEVIN LINEHAN - NORDEX