

OIL ANALYSIS REPORT

Area MAGENTA NTX [46004111] D622154

Wind Turbine Gearbox Fluic SHELL OMALA S5 WIND 320 (--- LTR)

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 Rating Trend



NORMAL

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		NX012599		
Sample Date		Client Info		05 Dec 2022		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>40	7		
Iron	ppm	ASTM D5185m	>55	0		
Chromium	ppm	ASTM D5185m	>2	0		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m	>10	0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>15	<1		
Lead	ppm		>3	0		
Copper	ppm	ASTM D5185m	>7	0		
Tin	ppm	ASTM D5185m	>3	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
	- PP			-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0		
Barium	ppm	ASTM D5185m		0		
Molybdenum	ppm	ASTM D5185m		0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m		0		
Calcium	ppm	ASTM D5185m		0		
Phosphorus	ppm	ASTM D5185m		484		
Zinc	ppm	ASTM D5185m		<1		
Sulfur	ppm	ASTM D5185m		3886		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	1		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	0		
Water	%	ASTM D6304	>0.02	0.037		
ppm Water	ppm	ASTM D6304	>200	374.2		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		5918		
Particles >6µm		ASTM D7647	>1300	629		
Particles >14µm		ASTM D7647	>160	15		
Particles >21µm		ASTM D7647	>40	3		
Particles >38µm		ASTM D7647	>10	0		
Particles >71µm		ASTM D7647	>3	0		
Oil Cleanliness		ISO 4406 (c)	>17/14	16/11		
FLUID DEGRADA	TION	method	limit/base	current	history1	history2

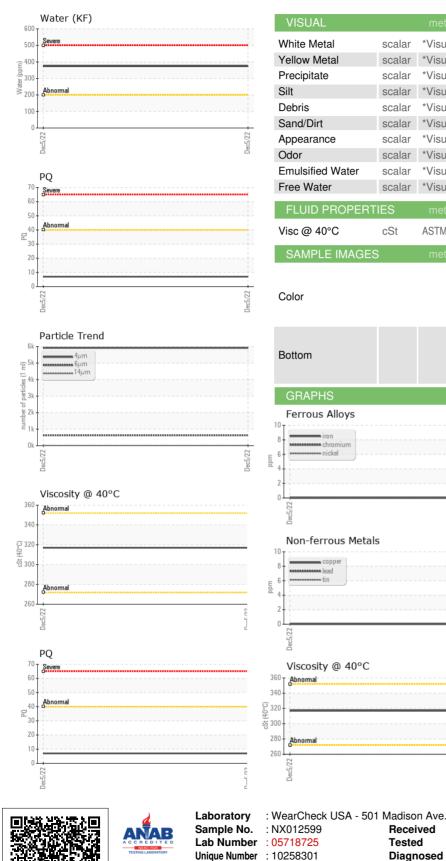
Acid Number (AN) mg KOH/g ASTM D8045

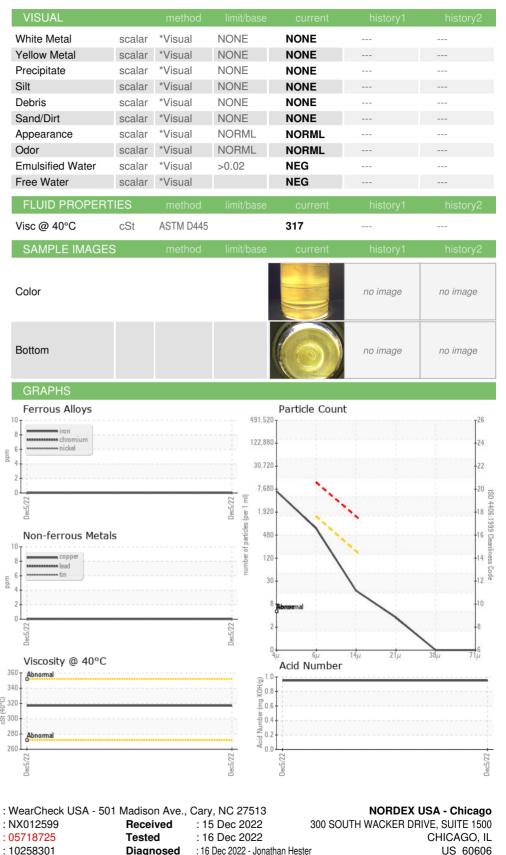
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Certificate 12367 Test Package : IND 2 (Additional Tests: KF, PQ, PrtCount) To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (312)386-7102

Contact: KEVIN REGAN

KRegan@nordex-online.com

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