

PROBLEM SUMMARY

Area **IRON STAR [200006142] 44WEA88315** Component

Wind Turbine Gearbox Fluid GEAR OIL (PAO) ISO 320 (--- LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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

PROBLEMATIC TES	T RESULTS			
Sample Status			ABNORMAL	
Particles >6µm	ASTM D7647	>1300	<u> </u>	
Oil Cleanliness	ISO 4406 (c)	>17/14	A 21/13	

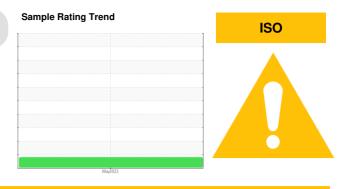
Customer Id: NORDEX Sample No.: NX05933541 Lab Number: 05933541 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Don Baldridge +1 <u>don.b505@comcast.net</u>

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



There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend

ISO

IRON STAR [200006142] 44WEA88315 Component

Wind Turbine Gearbox Fluid GEAR OIL (PAO) ISO 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 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.

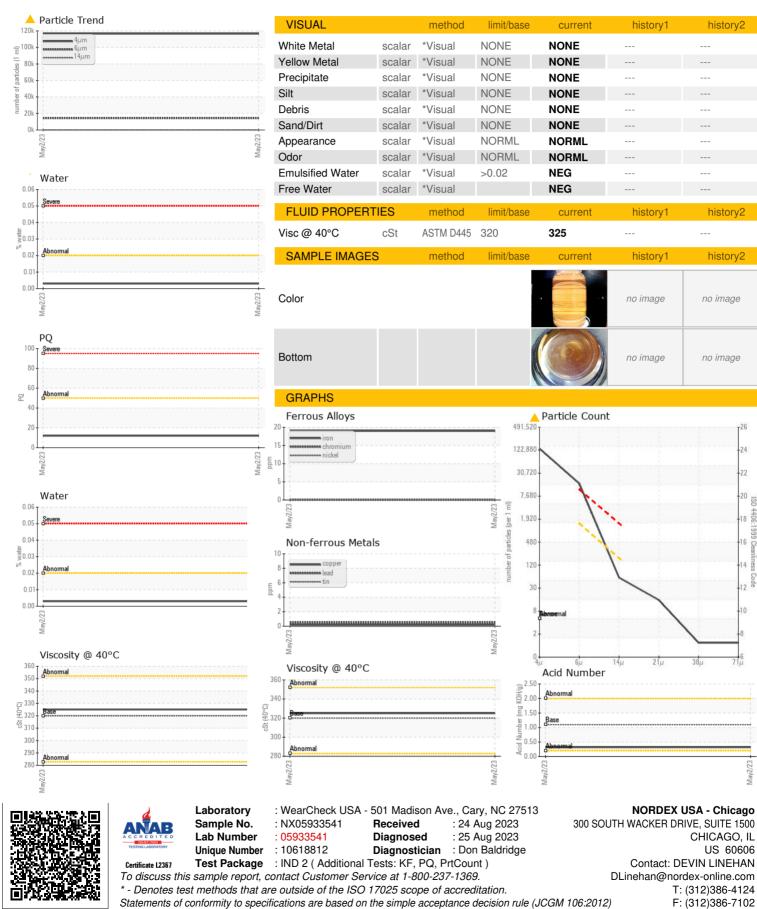
		-		May2023		
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		NX05933541		
Sample Date		Client Info		02 May 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>50	12		
Iron	ppm	ASTM D5185m	>30	19		
Chromium	ppm	ASTM D5185m	>3	0		
Nickel	ppm	ASTM D5185m	>3	0		
Titanium	ppm	ASTM D5185m	>10	0		
Silver	ppm	ASTM D5185m	210	0		
			>30	0		
Aluminum	ppm	ASTM D5185m		-		
Lead	ppm	ASTM D5185m	>15	<1		
Copper	ppm	ASTM D5185m	>10	<1		
Tin	ppm		>10	0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	25	7		
Barium	ppm	ASTM D5185m	12	2		
Molybdenum	ppm	ASTM D5185m	5	0		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	25	0		
Calcium	ppm	ASTM D5185m	25	18		
Phosphorus	ppm	ASTM D5185m	375	200		
Zinc	ppm	ASTM D5185m	25	4		
Sulfur		ASTM D5185m	4900	+ 5539		
	ppm			2228		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+15	13		
Sodium	ppm	ASTM D5185m		0		
Potassium	ppm	ASTM D5185m	>20	2		
Water	%	ASTM D6304	>0.02	0.003		
ppm Water	ppm	ASTM D6304	>200	31.3		
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		116564		
Particles >6µm		ASTM D7647	>1300	<u> </u>		
Particles >14µm		ASTM D7647	>160	50		
Particles >21µm		ASTM D7647	>40	13		
Particles >38µm		ASTM D7647	>10	1		
Particles >71µm		ASTM D7647		1		
Oil Cleanliness		ISO 4406 (c)	>17/14	<u> </u>		
FLUID DEGRADA		method	limit/base	current	history1	history2
					history	nistory2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.10	0.32		

Report Id: NORDEX [WUSCAR] 05933541 (Generated: 08/25/2023 20:17:15) Rev: 1

Contact/Location: DEVIN LINEHAN - NORDEX



OIL ANALYSIS REPORT



Contact/Location: DEVIN LINEHAN - NORDEX

CHICAGO, IL US 60606

history2

history2

history2

no image

no image

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