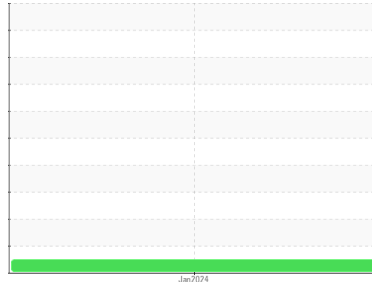


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**C-3-2 LO**  
Component  
**Wind Turbine Gearbox**  
Fluid  
**GEAR OIL (PAO) ISO 320 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>MHI026214</b>	---	---
Sample Date	Client Info			<b>08 Jan 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>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184	>200	<b>19</b>	---	---
Iron	ppm	ASTM D5185m	>200	<b>20</b>	---	---
Chromium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	>10	<b>&lt;1</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	>75	<b>1</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---

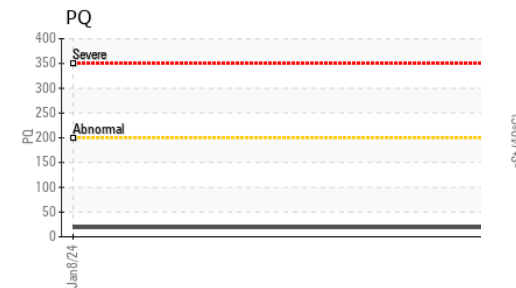
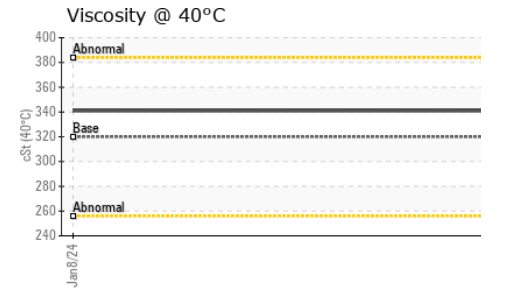
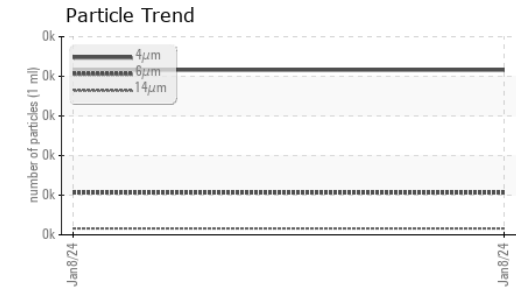
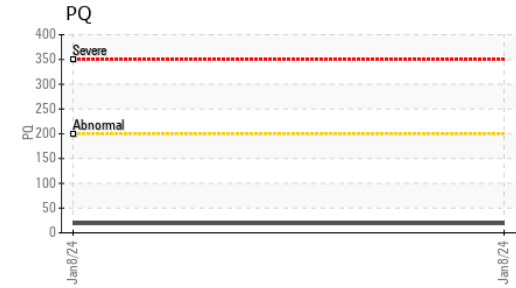
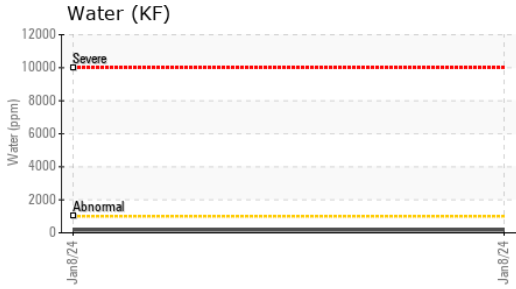
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	25	<b>0</b>	---	---
Barium	ppm	ASTM D5185m	12	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	---	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	25	<b>0</b>	---	---
Calcium	ppm	ASTM D5185m	25	<b>0</b>	---	---
Phosphorus	ppm	ASTM D5185m	375	<b>406</b>	---	---
Zinc	ppm	ASTM D5185m	25	<b>0</b>	---	---
Sulfur	ppm	ASTM D5185m	4900	<b>3985</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+30	<b>2</b>	---	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Water	%	ASTM D6304	>0.1	<b>0.017</b>	---	---
ppm Water	ppm	ASTM D6304	>1000	<b>172</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>208</b>	---	---
Particles >6µm		ASTM D7647	>5000	<b>53</b>	---	---
Particles >14µm		ASTM D7647	>640	<b>8</b>	---	---
Particles >21µm		ASTM D7647	>160	<b>2</b>	---	---
Particles >38µm		ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>--/19/16	<b>15/13/10</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.10	<b>0.92</b>	---	---

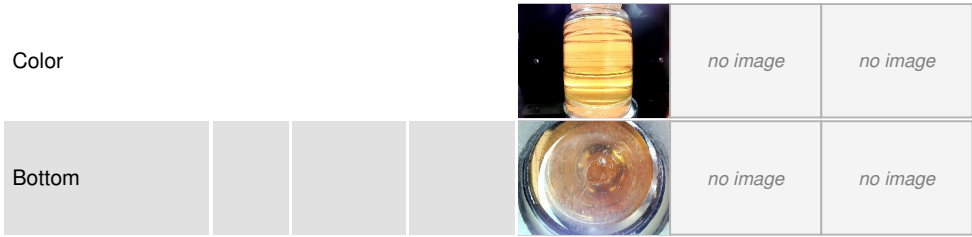
# OIL ANALYSIS REPORT



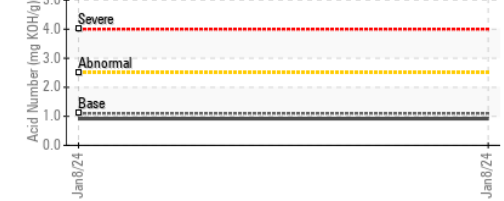
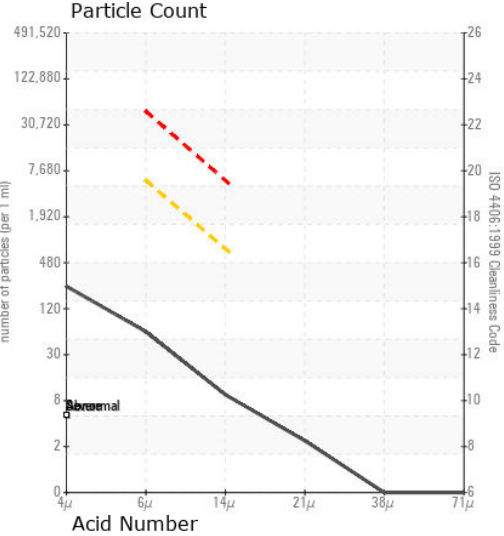
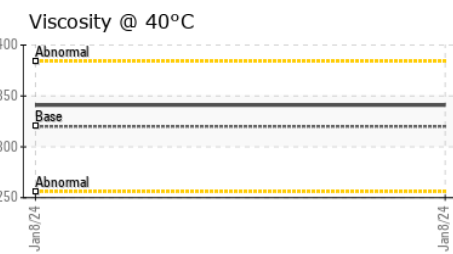
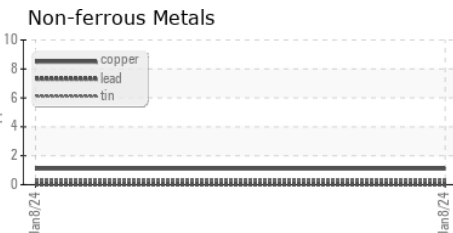
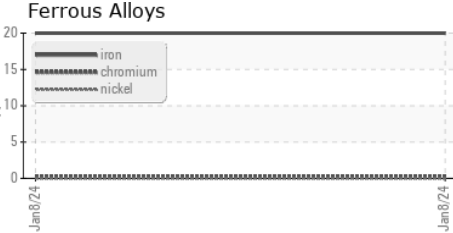
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	341	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MH1026214 **Recieved** : 31 Jan 2024  
**Lab Number** : 06075769 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10857860 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PQ, PrtCount )

**DIAMOND WTG - MOUNTAIN VIEW IV**  
P.O. BOX 880  
DESERT HOT SPRINGS, CA  
US 92240  
Contact: SERVICE MANAGER

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)