

OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
NOT GIVEN MH1021768 (S/N NO INFO ON SIF/BOTTLE)
 Component
Wind Turbine Gearbox
 Fluid
ROYAL PURPLE (--- GAL)

DIAGNOSIS

Recommendation

Replace filter element and resample at later date. In case already attempted and cleanliness was not improved then proceed to replace oil.

Wear

All component wear rates are normal.

Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			MH1021768	---	---
Sample Date	Client Info			14 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	>200	21	---	---
Iron	ppm	ASTM D5185m	>200	6	---	---
Chromium	ppm	ASTM D5185m	>3	0	---	---
Nickel	ppm	ASTM D5185m	>3	<1	---	---
Titanium	ppm	ASTM D5185m	>10	0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>30	<1	---	---
Lead	ppm	ASTM D5185m	>15	0	---	---
Copper	ppm	ASTM D5185m	>75	17	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

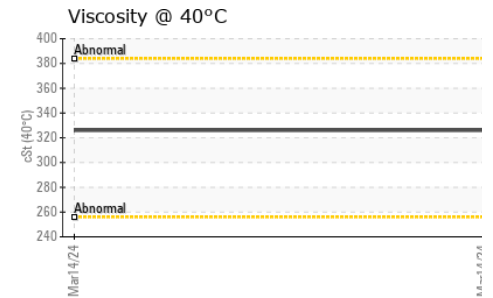
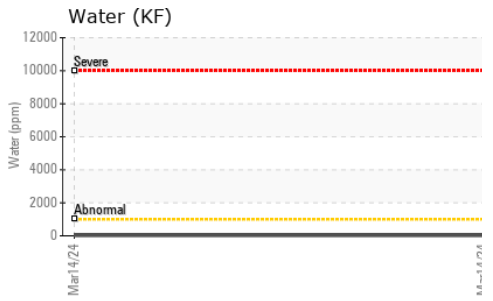
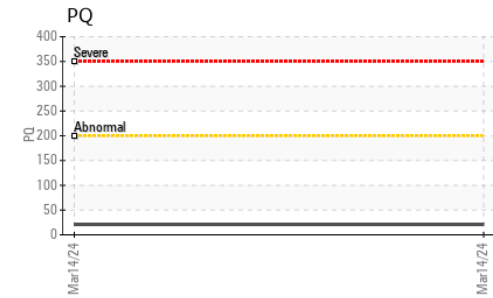
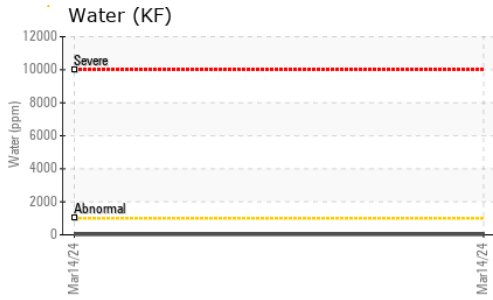
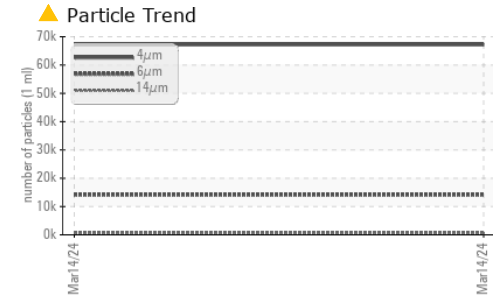
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		<1	---	---
Molybdenum	ppm	ASTM D5185m		5	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		2	---	---
Calcium	ppm	ASTM D5185m		45	---	---
Phosphorus	ppm	ASTM D5185m		37	---	---
Zinc	ppm	ASTM D5185m		29	---	---
Sulfur	ppm	ASTM D5185m		22024	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+30	2	---	---
Sodium	ppm	ASTM D5185m		1	---	---
Potassium	ppm	ASTM D5185m	>20	3	---	---
Water	%	ASTM D6304	>0.1	0.002	---	---
ppm Water	ppm	ASTM D6304	>1000	25	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		67197	---	---
Particles >6µm		ASTM D7647	>5000	▲ 14163	---	---
Particles >14µm		ASTM D7647	>640	● 686	---	---
Particles >21µm		ASTM D7647	>160	129	---	---
Particles >38µm		ASTM D7647	>40	7	---	---
Particles >71µm		ASTM D7647	>10	2	---	---
Oil Cleanliness		ISO 4406 (c)	>--/19/16	▲ 23/21/17	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.46	---	---

OIL ANALYSIS REPORT



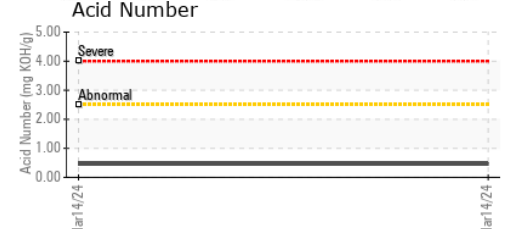
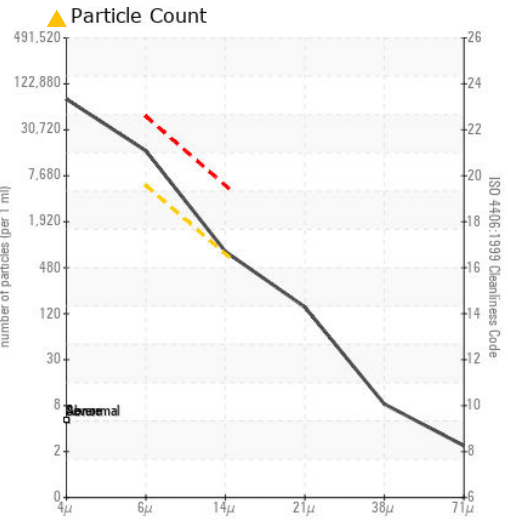
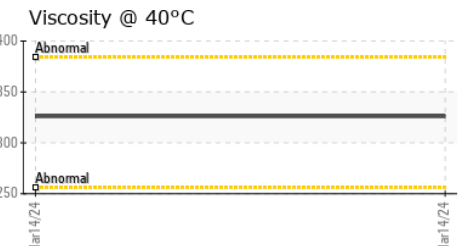
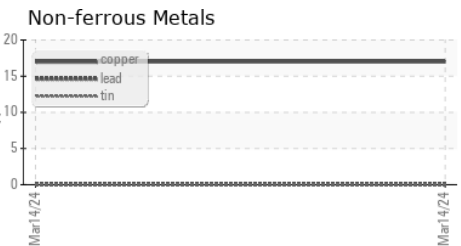
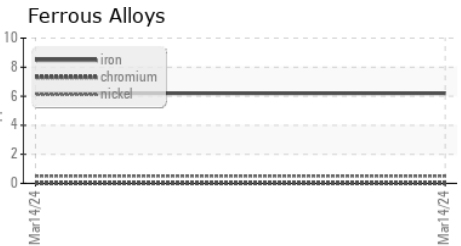
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
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	326	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MHI021768 **Received** : 10 Jun 2024
Lab Number : 06204576 **Tested** : 11 Jun 2024
Unique Number : 11072037 **Diagnosed** : 12 Jun 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: KF, PQ, PrtCount)

DIAMOND WTG - WHITE DEER SITE - MPS WD
 PO BOX 872
 WHITE DEER, TX
 US 79097

Contact: WESLEY CAMPBELL
 wesley.campbell@diamondwtg.com

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)

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