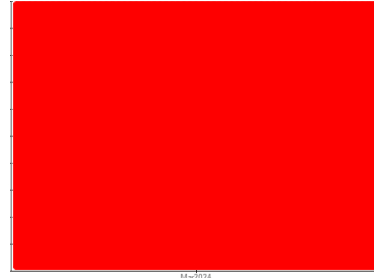
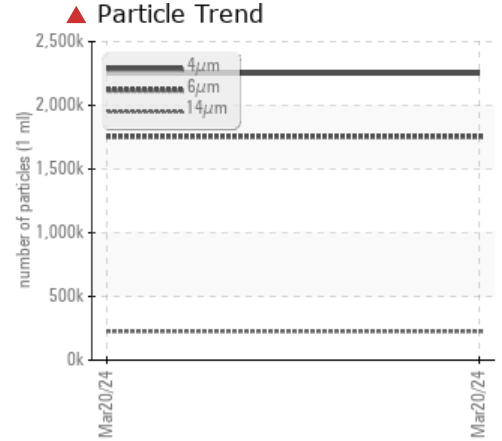
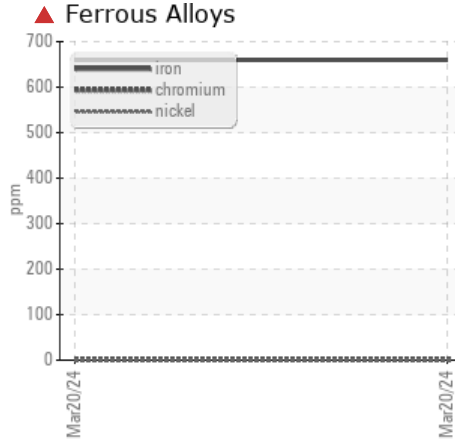
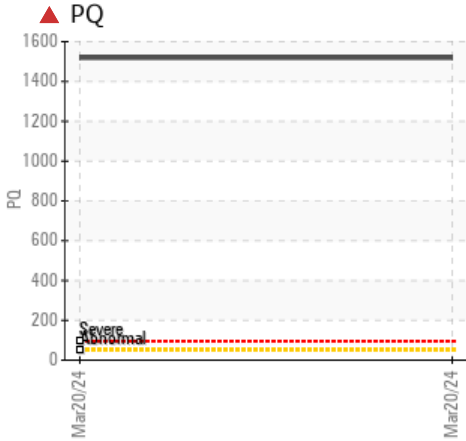


Machine Id
CFM ASPIRATION

Component
Wind Turbine Gearbox
Fluid
{not provided} (2 LTR)



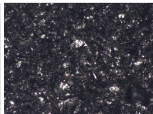
COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
PQ		ASTM D8184*	>50	▲ 1519	---	---
Iron	ppm	ASTM D5185(m)	>30	▲ 660	---	---
Particles >6µm		ASTM D7647	>320	▲ 1755009	---	---
Particles >14µm		ASTM D7647	>40	▲ 225567	---	---
Particles >21µm		ASTM D7647	>10	▲ 19971	---	---
Particles >38µm		ASTM D7647	>3	▲ 129	---	---
Oil Cleanliness		ISO 4406 (c)	>--/15/12	▲ 28/28/25	---	---
White Metal	scalar	Visual*	NONE	▲ LTMOD	---	---
PrtFilter					no image	no image

Customer Id: PROAMO
Sample No.: PC0070448
Lab Number: 02624439
Test Package: IND 2



To manage this report scan the QR code

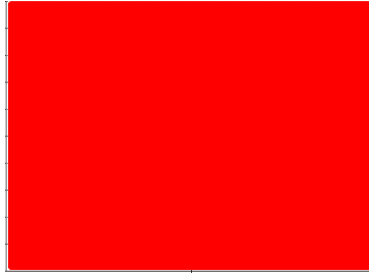
To discuss the diagnosis or test data:
Kevin Marson +1 (289)291-4644 x4644
Kevin.Marson@wearcheck.com

To change component or sample information:
Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Check For Visual Metal	---	---	?	We advise that you check for visible metal particles in the oil.

HISTORICAL DIAGNOSIS



Machine Id
CFM ASPIRATION

Component
Wind Turbine Gearbox
Fluid
{not provided} (2 LTR)

DIAGNOSIS

▲ Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. We recommend that you drain the oil from the component if this has not already been done. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation. Please specify the brand, type, and viscosity of the oil on your next sample.

▲ Wear

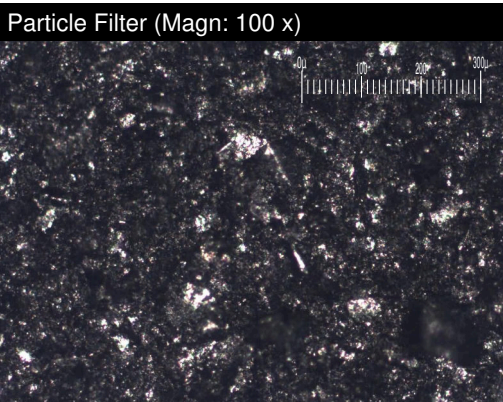
Iron ppm levels are severe. PQ levels are severe. Light concentration of visible metal present. Gear wear is indicated. The very high ferrous density (PQ) index indicates that severe wear is occurring.

▲ Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil. The water content is negligible.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.



SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0070448	---	---
Sample Date	Client Info	20 Mar 2024	---	---
Machine Age	hrs Client Info	503	---	---
Oil Age	hrs Client Info	503	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		SEVERE	---	---

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184* >50	▲ 1519	---	---
Iron	ppm ASTM D5185(m) >30	▲ 660	---	---
Chromium	ppm ASTM D5185(m) >3	<1	---	---
Nickel	ppm ASTM D5185(m) >3	0	---	---
Titanium	ppm ASTM D5185(m) >10	<1	---	---
Silver	ppm ASTM D5185(m)	0	---	---
Aluminum	ppm ASTM D5185(m) >30	<1	---	---
Lead	ppm ASTM D5185(m) >15	0	---	---
Copper	ppm ASTM D5185(m) >10	2	---	---
Tin	ppm ASTM D5185(m) >10	0	---	---
Antimony	ppm ASTM D5185(m) >5	0	---	---
Vanadium	ppm ASTM D5185(m)	0	---	---
Beryllium	ppm ASTM D5185(m)	0	---	---
Cadmium	ppm ASTM D5185(m)	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m)	1	---	---
Barium	ppm ASTM D5185(m)	3	---	---
Molybdenum	ppm ASTM D5185(m)	0	---	---
Manganese	ppm ASTM D5185(m)	2	---	---
Magnesium	ppm ASTM D5185(m)	4	---	---
Calcium	ppm ASTM D5185(m)	101	---	---
Phosphorus	ppm ASTM D5185(m)	377	---	---
Zinc	ppm ASTM D5185(m)	480	---	---
Sulfur	ppm ASTM D5185(m)	10320	---	---
Lithium	ppm ASTM D5185(m)	<1	---	---

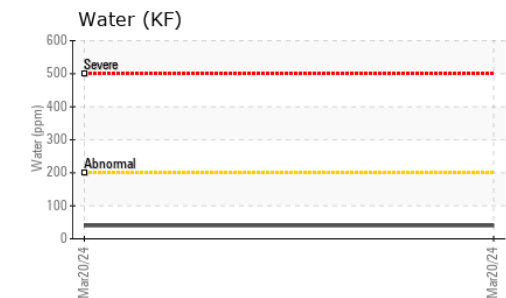
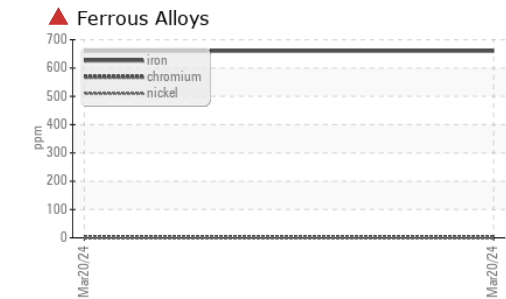
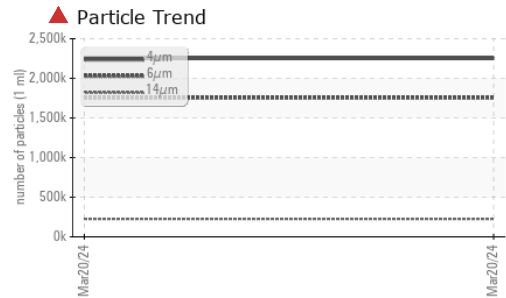
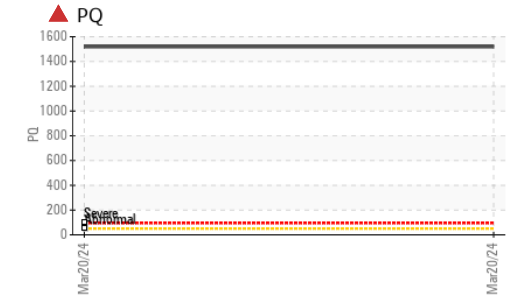
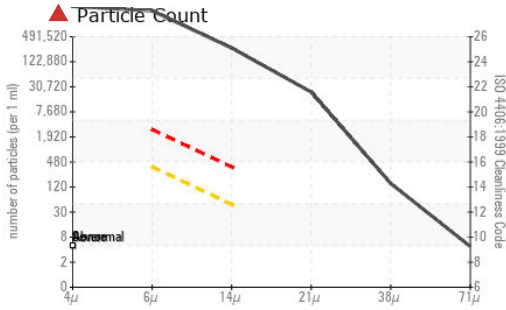
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >+15	19	---	---
Sodium	ppm ASTM D5185(m)	3	---	---
Potassium	ppm ASTM D5185(m) >20	<1	---	---
Water	% ASTM D6304* >0.02	0.004	---	---
ppm Water	ppm ASTM D6304* >200	40	---	---

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	2250268	---	---
Particles >6µm	ASTM D7647 >320	▲ 1755009	---	---
Particles >14µm	ASTM D7647 >40	▲ 225567	---	---
Particles >21µm	ASTM D7647 >10	▲ 19971	---	---
Particles >38µm	ASTM D7647 >3	▲ 129	---	---
Particles >71µm	ASTM D7647 >3	4	---	---
Oil Cleanliness	ISO 4406 (c) >--/15/12	▲ 28/28/25	---	---

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0070448 **Received** : 25 Mar 2024
Lab Number : 02624439 **Tested** : 27 Mar 2024
Unique Number : 5749558 **Diagnosed** : 27 Mar 2024 - Kevin Marson
Test Package : IND 2 (Additional Tests: BottomAnalysis, FILTERPATCH, KF, KV100, PQ, PrtCount, PrtFilter, TAN, TBN)

PETRONOR INC
 2920 RTE 111 EST
 AMOS, QC
 CA J9T 3A1
 Contact: Daniel Doucet
 pphlube@cableamos.com
 T: (819)732-2076
 F: (819)732-5705

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	1.30	---	---

VISUAL

method	limit/base	current	history1	history2
White Metal	scalar Visual*	NONE	▲ LTMOD	---
Yellow Metal	scalar Visual*	NONE	NONE	---
Precipitate	scalar Visual*	NONE	NONE	---
Silt	scalar Visual*	NONE	VLITE	---
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*	>0.02	NEG	---
Free Water	scalar Visual*		NEG	---

FLUID PROPERTIES

method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	233	---	---
Visc @ 100°C	cSt ASTM D7279(m)	19.6	---	---
Viscosity Index (VI)	Scale ASTM D2270*	95	---	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				
Bottom				
PrtFilter				