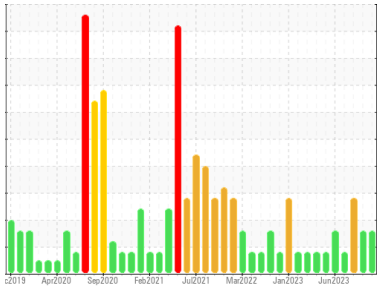
PROBLEM SUMMARY

Sample Rating Trend

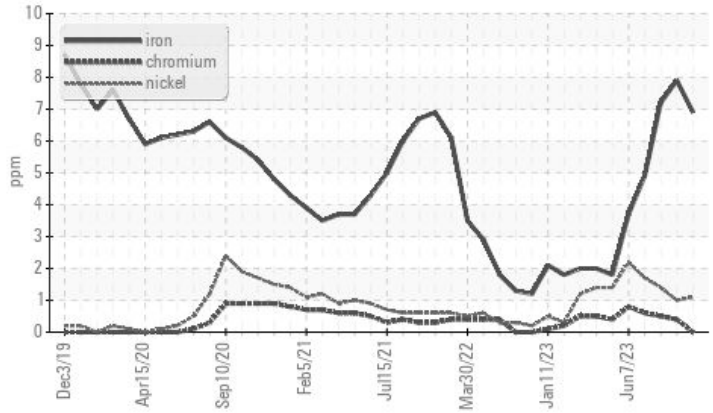


WEAR

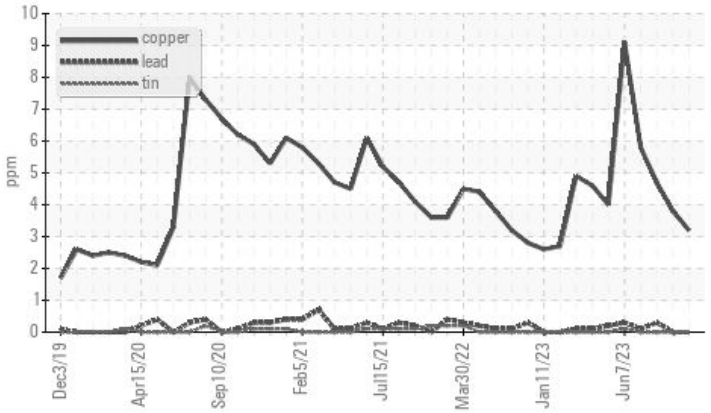
Machine Id
CO-GEN #2
Component
Turbine
Fluid
MOBIL JET OIL II (120 GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Non-ferrous Metals



RECOMMENDATION

We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185(m)	>5	▲ **7**	▲ 8	▲ 7
Copper	ppm	ASTM D5185(m)	>2	▲ **3**	▲ 4	▲ 5

Customer Id: AVETOR
Sample No.: WC0847671
Lab Number: 02588616
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
Resample	---	---	?	We recommend an early resample to monitor this condition.
Contact Required	---	---	?	Please contact your representative for information regarding the proper sampling kits for your service.
Alert	---	---	?	NOTE: We recommend using IND 3 test kits,

HISTORICAL DIAGNOSIS

10 Sep 2023 Diag: Kevin Marson

WEAR

We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Iron ppm levels are abnormal. Copper ppm levels are noted. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

11 Aug 2023 Diag: Kevin Marson

WEAR

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Iron ppm levels are abnormal. Copper ppm levels are noted. There is a light amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

10 Jul 2023 Diag: Kevin Marson

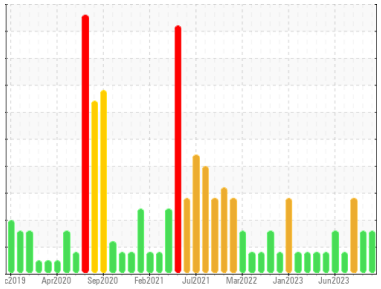
WEAR

We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.Copper ppm levels are noted. All other component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
CO-GEN #2
Component
Turbine
Fluid
MOBIL JET OIL II (120 GAL)

DIAGNOSIS

▲ Recommendation

We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using IND 3 test kits, this testkit includes Analytical Ferrography which provides a detailed morphological analysis of wear particles present in the fluid.

▲ Wear

Iron ppm levels are abnormal. Copper ppm levels are noted.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

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		**WC0847671**	WC0847661	WC0781348
Sample Date		Client Info		**10 Oct 2023**	10 Sep 2023	11 Aug 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	0	0
Iron	ppm	ASTM D5185(m)	>5	▲ **7**	▲ 8	▲ 7
Chromium	ppm	ASTM D5185(m)	>2	**0**	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	**1**	1	1
Titanium	ppm	ASTM D5185(m)	>2	**0**	0	0
Silver	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Aluminum	ppm	ASTM D5185(m)	>2	**0**	0	0
Lead	ppm	ASTM D5185(m)	>4	**0**	0	<1
Copper	ppm	ASTM D5185(m)	>2	▲ **3**	▲ 4	▲ 5
Tin	ppm	ASTM D5185(m)	>3	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	0
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

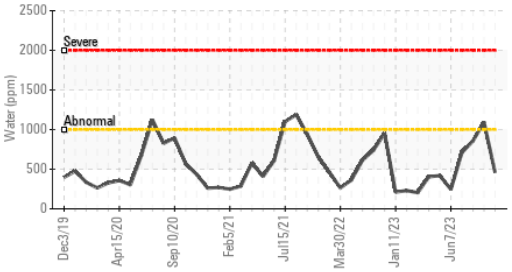
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0.5	**<1**	2	<1
Barium	ppm	ASTM D5185(m)	0.0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	**0**	0	0
Manganese	ppm	ASTM D5185(m)	0.0	**0**	0	0
Magnesium	ppm	ASTM D5185(m)	0.0	**0**	<1	0
Calcium	ppm	ASTM D5185(m)	0.0	**<1**	<1	<1
Phosphorus	ppm	ASTM D5185(m)	3039	**2265**	2384	2321
Zinc	ppm	ASTM D5185(m)	0.3	**<1**	2	2
Sulfur	ppm	ASTM D5185(m)	38	**4**	7	5
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>5	**<1**	<1	<1
Sodium	ppm	ASTM D5185(m)		**<1**	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Water	%	ASTM D6304*	>.1	**0.045**	0.109	0.085
ppm Water	ppm	ASTM D6304*	>1000	**459.5**	1092.1	857.5

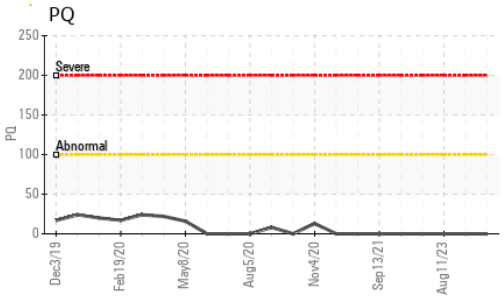
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>2500	**329**	550	▲ 2996
Particles >6µm		ASTM D7647	>640	**90**	123	▲ 731
Particles >14µm		ASTM D7647	>80	**5**	8	63
Particles >21µm		ASTM D7647	>20	**1**	3	25
Particles >38µm		ASTM D7647	>4	**0**	0	2
Particles >71µm		ASTM D7647	>3	**0**	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	**16/14/10**	16/14/10	▲ 19/17/13

OIL ANALYSIS REPORT

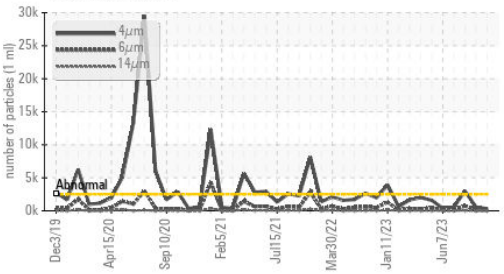
Water (KF)



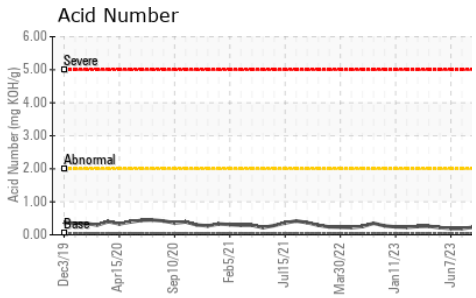
PQ



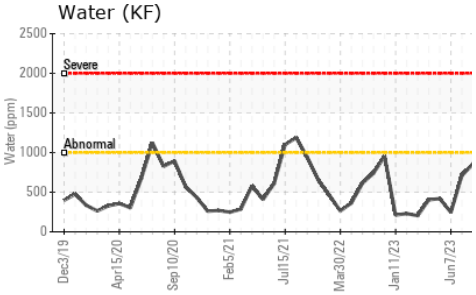
Particle Trend



Acid Number



Water (KF)



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.05	**0.19**	0.24	0.23

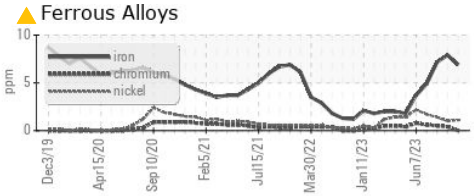
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
Silt	scalar	Visual*	NONE	**NONE**	NONE	VLITE
Debris	scalar	Visual*	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	NONE
Appearance	scalar	Visual*	NORML	**NORML**	NORML	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	25.4	**27.3**	27.6	27.3

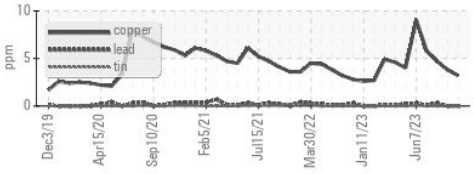
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

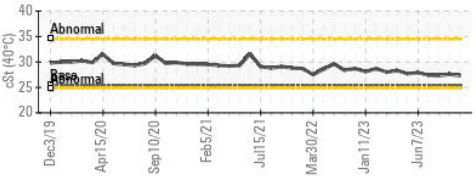
Ferrous Alloys



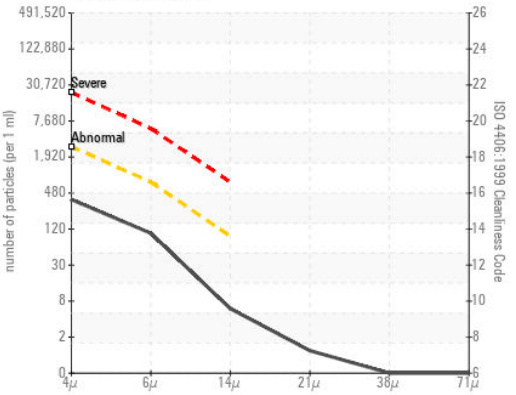
Non-ferrous Metals



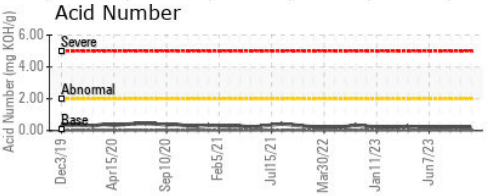
Viscosity @ 40°C



Particle Count



Acid Number



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0847671 **Received** : 12 Oct 2023
Lab Number : 02588616 **Diagnosed** : 13 Oct 2023
Unique Number : 5657682 **Diagnostician** : Kevin Marson
Test Package : IND 2 (Additional Tests: PQ)

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.

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