

PROBLEM SUMMARY

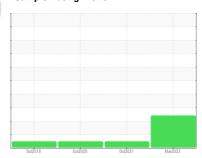
Sample Rating Trend

DIRT

FLUE GAS RECIRC FAN F1 - outboard bearing (S/N 1-31830-F1)

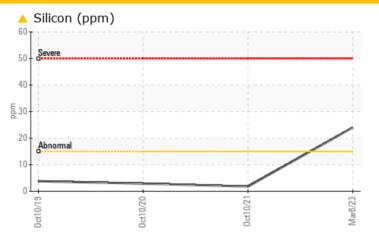
Outboard Bearing

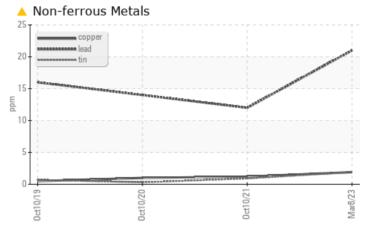
ESSO TERESSO ISO 68 (--- GAL)





COMPONENT CONDITION SUMMARY





RECOMMENDATION

Check seals and/or filters for points of contaminant entry. 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 an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

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Sample Status				ABNORMAL	NORMAL	NORMAL
Lead	ppm	ASTM D5185(m)	>20	<u>^</u> 21	12	14
Silicon	ppm	ASTM D5185(m)	>15	<u>^</u> 24	2	3

Customer Id: ONTATI **Sample No.:** WC0745432 Lab Number: 02545728 Test Package: IND 1



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.
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with 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 Seals			?	Check seals and/or filters for points of contaminant entry.

HISTORICAL DIAGNOSIS

10 Oct 2021 Diag: Bill Quesnel

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



10 Oct 2020 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. The water content is negligible. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



10 Oct 2019 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.





OIL ANALYSIS REPORT

Sample Rating Trend

DIRT

Machine Id

FLUE GAS RECIRC FAN F1 - outboard bearing (S/N 1-31830-F1)

Component

Outboard Bearing

ESSO TERESSO ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. 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 an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

Lead ppm levels are noted. All other component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material. The water content is negligible.

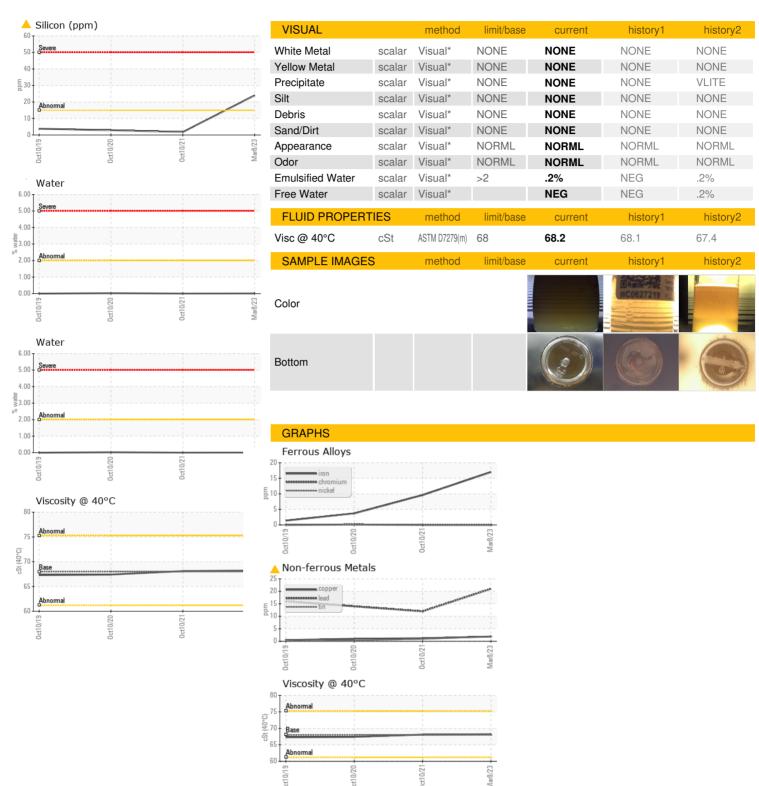
Fluid Condition

The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

	Oct2019 Oct2020 Oct2021 Mw/2023					
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0745432	WC0627219	WC0510865
Sample Date		Client Info		08 Mar 2023	10 Oct 2021	10 Oct 2020
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	NORMAL	NORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	17	10	4
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	<1	<1
Lead	ppm	ASTM D5185(m)	>20	<u> </u>	12	14
Copper	ppm	ASTM D5185(m)	>20	2	1	1
Tin	ppm	ASTM D5185(m)	>20	2	<1	<1
Antimony	ppm	ASTM D5185(m)		2	1	<1
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)	4.5	<1	<1	<1
Barium	ppm	ASTM D5185(m)	0.4	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	0	<1
Calcium	ppm	ASTM D5185(m)	0	<1	1	<1
Phosphorus	ppm	ASTM D5185(m)	0.7	2	<1	1
Zinc	ppm	ASTM D5185(m)	0	4	2	4
Sulfur	ppm	ASTM D5185(m)	1315	5433	6114	2042
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	4 24	2	3
Sodium	ppm	ASTM D5185(m)		4	5	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water	%	ASTM D6304*	>2	0.006		0.024
ppm Water	ppm	ASTM D6304*		68.7		243.0



OIL ANALYSIS REPORT







Laboratory

Laboratory Sample No. Lab Number **Unique Number**

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 : 5542733

: WC0745432 : 02545728

Received

Diagnosed

: 16 Mar 2023 : 20 Mar 2023

Diagnostician : Kevin Marson

Test Package : IND 1 (Additional Tests: KF)

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.

Ontario Power Generation ATIKOKAN T.G.S., BOX 1900 ATIKOKAN, ON

> CA POT 1C0 Contact: Dale Anthony dale.anthony@opg.com

> > F: (807)597-1198

Submitted By: ?

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