

PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

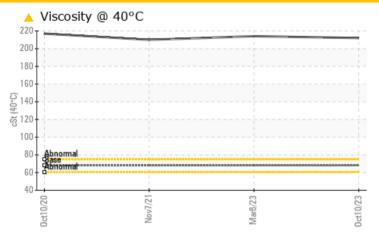
FLUE GAS RECIRC FAN F1 - turning gear gear box (S/N 1-31830-F1)

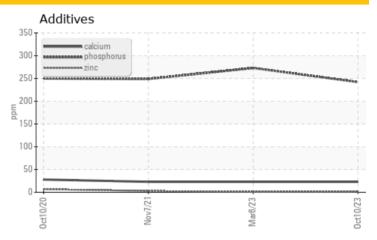
Component

Gearbox

ESSO TERESSO ISO 68 (--- GAL)







RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 220 Gear Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS	PROBLE	MATIC	TEST	RESU	LTS
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Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Visc @ 40°C	cSt	ASTM D7279(m)	68	<u>^</u> 212	<u>^</u> 214	<u>^</u> 210

Customer Id: ONTATI Sample No.: WC0861490 Lab Number: 02604234 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
Alert			?	The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 220 Gear Oil. Please confirm the oil type and grade on your next sample.
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Fluid Source			?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

08 Mar 2023 Diag: Kevin Marson

VISCOSITY



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 220 Gear Oil. Please confirm the oil type and grade on your next sample. 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. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.



07 Nov 2021 Diag: Kevin Marson

VISCOSITY



Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 220 Gear Oil. Please confirm the oil type and grade on your next sample. 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. Viscosity of sample indicates oil is within ISO 220 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.



10 Oct 2020 Diag: Kevin Marson

VISCOSITY



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OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY

FLUE GAS RECIRC FAN F1 - turning gear gear box (S/N 1-31830-F1)

Gearbox

ESSO TERESSO ISO 68 (--- GAL)

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as ESSO TERESSO ISO 68, however, a fluid match indicates that this fluid is ISO 220 Gear Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

		0ct2020	Nov2021	Mar2023 (0ct2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0861490	WC0745433	WC0627220
Sample Date		Client Info		10 Oct 2023	08 Mar 2023	07 Nov 2021
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
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
ron	ppm	ASTM D5185(m)	>200	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>15	0	0	0
Nickel	ppm	ASTM D5185(m)	>15	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	0	0
Aluminum	ppm	ASTM D5185(m)	>25	0	<1	0
Lead	ppm	ASTM D5185(m)	>100	<1	0	<1
Copper	ppm	ASTM D5185(m)	>200	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>25	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	0	<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	20	22	20
Barium	ppm	ASTM D5185(m)	0.4	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	0	0
Calcium	ppm	ASTM D5185(m)	0	23	23	23
Phosphorus	ppm	ASTM D5185(m)	0.7	242	273	249
Zinc	ppm	ASTM D5185(m)	0	1	1	3
Sulfur	ppm	ASTM D5185(m)	1315	7980	8324	7899
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS	3	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>50	1	2	3
Sodium	ppm	ASTM D5185(m)		<1	<1	<1
Datassium		ACTM DE40E/\	00	^	0	4

Potassium

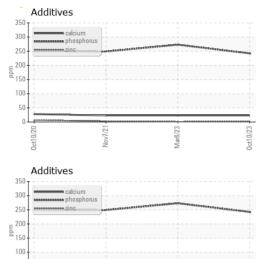
ppm

ASTM D5185(m) >20

<1



OIL ANALYSIS REPORT

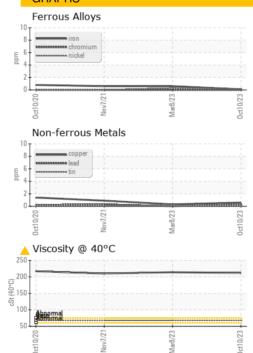


1//01/14/						
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68	<u>^</u> 212	△ 214	△ 210
SAMPLE IMAGES	6	method	limit/base	current	history1	history2

GRAPHS

Color

Bottom





CALA ISO 17025:2017 Accredited Laboratory

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

: WC0861490 : 02604234 : 5697319

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

: 19 Dec 2023 Diagnosed : 20 Dec 2023 Diagnostician : Kevin Marson

Test Package : IND 1

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

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Submitted By: ?