

PROBLEM SUMMARY

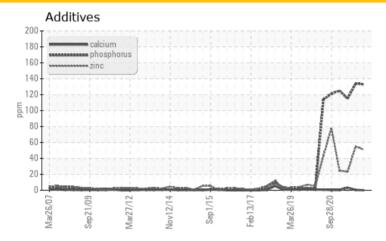
Area [198764] **WBK G THBR**

Component Bearing

ESSO TERESSO ISO 68 (10 LTR)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. 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 advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS								
Sample Status				ABNORMAL	ABNORMAL	SEVERE		
Emulsified Water	scalar	Visual*	>2	.2 %	.5%	<u>1</u> %		
Free Water	scalar	Visual*		1 %	<u></u> 1%	<u>1</u> %		

Customer Id: NEWSTJ Sample No.: WC0328091 Lab Number: 02554180 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Bill Quesnel CLS,OMA II,MLA-III,LLA-I +1 (289)291-4641 x4641

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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.
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 Fluid Source			?	Confirm the source of the lubricant being utilized for top-up/fill.
Check Water Access			?	We advise that you check for the source of water entry.
Check Seals			?	Check seals and/or filters for points of contaminant entry.
Filter Fluid			?	We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil.

HISTORICAL DIAGNOSIS

14 Mar 2022 Diag: Kevin Marson

WATER



We advise that you check for the source of water entry. 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 advise that you follow the water drain-off procedure for this component. We recommend that you change the oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. All component wear rates are normal. Free water present. Additive levels indicate the addition of a different brand, or type of oil. The white residue present in the sample is oil additive precipitate. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.



WEAR



20 Oct 2021 Diag: Kevin Marson

We advise that you check for the source of water entry. 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 that you drain the oil from the component if this has not already been done. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Tin ppm levels are severe. Copper ppm levels are abnormal. Antimony ppm levels are noted. Bearing wear is indicated. There is a moderate concentration of water present in the oil. Free water present. Additive levels indicate the addition of a different brand, or type of oil. The white residue present in the sample is oil additive precipitate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.



WATER



15 Mar 2021 Diag: Kevin Marson

We advise that you check for the source of water entry. 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 advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition. Copper ppm levels are abnormal. Bearing wear is indicated. Free water present. Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.





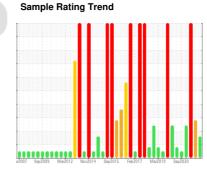
OIL ANALYSIS REPORT

Area [198764] **WBK G THBR**

Component

Bearing

ESSO TERESSO ISO 68 (10 LTR)





DIAGNOSIS

Recommendation

We advise that you check for the source of water entry. 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 advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. Confirm the source of the lubricant being utilized for topup/fill. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate concentration of water present in the oil. Free water present.

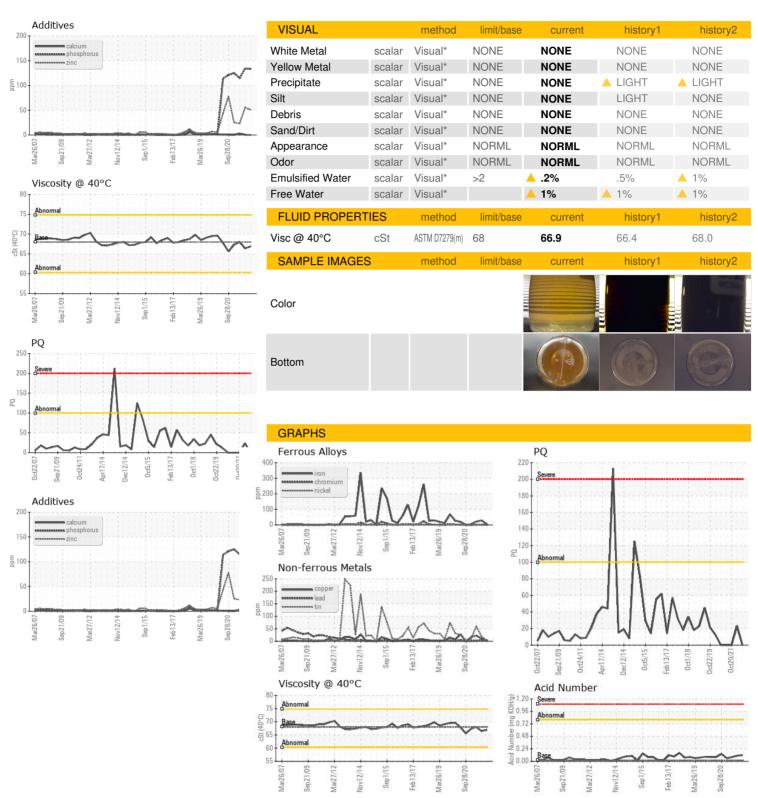
Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0328091	WC0445264	WC0445259
Sample Date		Client Info		26 Mar 2023	14 Mar 2022	20 Oct 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	ABNORMAL	SEVERE
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	23	0
Iron	ppm	ASTM D5185(m)	>63	4	29	21
Chromium	ppm	ASTM D5185(m)	>20	0	1	1
Nickel	ppm	ASTM D5185(m)	>20	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	<1
Aluminum	ppm	ASTM D5185(m)	>2	<1	2	1
Lead	ppm	ASTM D5185(m)	>161	3	4	3
Copper	ppm	ASTM D5185(m)	>13	4	10	<u>^</u> 23
Tin	ppm	ASTM D5185(m)	>27	3	18	• 59
Antimony	ppm	ASTM D5185(m)		<1	2	<u> 5</u>
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		<1	<1	<1
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	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	0	<1	0	1
Calcium	ppm	ASTM D5185(m)	0	0	<1	3
Phosphorus	ppm	ASTM D5185(m)	0.7	133	134	115
Zinc	ppm	ASTM D5185(m)	0	51	55	23
Sulfur	ppm	ASTM D5185(m)	1315	2444	2435	2391
Lithium	ppm	ASTM D5185(m)		<1	<1	<1
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>12	<1	3	4
Sodium	ppm	ASTM D5185(m)		<1	<1	5
		10711071071	>20		<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	< 1	< 1
Potassium FLUID DEGRADA		ASIM D5185(m) method	>20 limit/base	<1 current	history1	history2



OIL ANALYSIS REPORT







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

: WC0328091 : 02554180 : 5567195

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

: Bill Quesnel Diagnostician

: 28 Apr 2023

: 01 May 2023

Test Package : IND 2 (Additional Tests: TAN Man)

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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