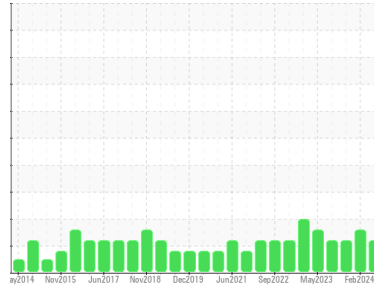




# OIL ANALYSIS REPORT

Sample Rating Trend



Area  
**412**  
Machine Id  
**622 BANBURY MOTOR**  
Component  
**Outboard Journal Bearing**  
Fluid  
**ESSO NUTO H ISO 68 (1 QTS)**

## DIAGNOSIS

**Recommendation**  
The oil change at the time of sampling has been noted. We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.

**Wear**  
All component wear rates are normal.

**Contamination**  
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

**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	<b>WC0479428</b>	WC06087143	WC0838937
Sample Date	Client Info	<b>14 Mar 2024</b>	08 Feb 2024	10 Nov 2023
Machine Age	hrs	<b>0</b>	0	6
Oil Age	hrs	<b>600</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	N/A	Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	<b>11</b>	16	8
Iron	ppm ASTM D5185m >60	<b>0</b>	0	<1
Chromium	ppm ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >4	<b>0</b>	0	<1
Lead	ppm ASTM D5185m >250	<b>&lt;1</b>	<1	<1
Copper	ppm ASTM D5185m >125	<b>3</b>	2	5
Tin	ppm ASTM D5185m >80	<b>2</b>	2	5
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	<b>0</b>	0	0
Barium	ppm ASTM D5185m 0	<b>0</b>	0	6
Molybdenum	ppm ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Magnesium	ppm ASTM D5185m 5	<b>0</b>	0	<1
Calcium	ppm ASTM D5185m 50	<b>50</b>	40	49
Phosphorus	ppm ASTM D5185m 330	<b>335</b>	333	322
Zinc	ppm ASTM D5185m 420	<b>424</b>	436	405
Sulfur	ppm ASTM D5185m 3100	<b>3510</b>	3027	3210

## CONTAMINANTS

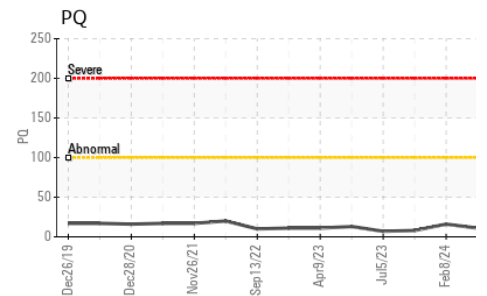
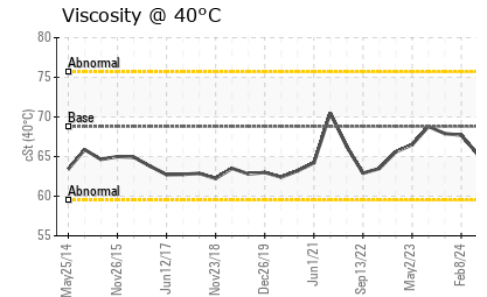
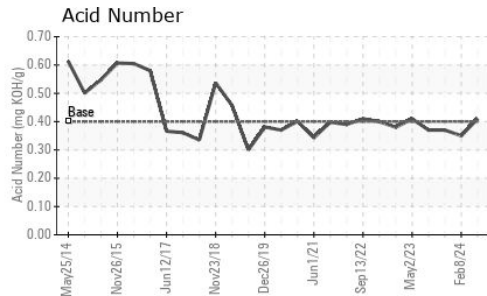
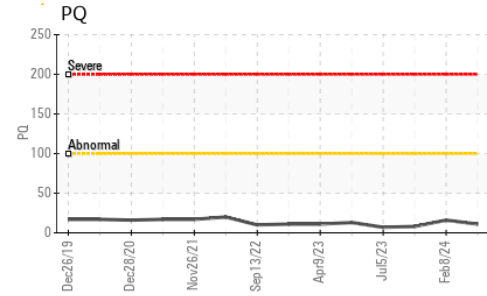
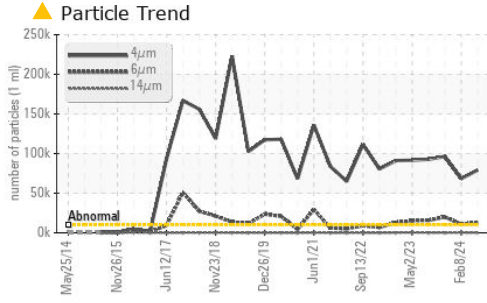
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>3</b>	4	3
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	<1	0
Potassium	ppm ASTM D5185m >20	<b>0</b>	0	<1

## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 79202</b>	▲ 68361	▲ 96332
Particles >6µm	ASTM D7647 >2500	<b>▲ 13234</b>	▲ 10867	▲ 19999
Particles >14µm	ASTM D7647 >160	<b>98</b>	▲ 211	156
Particles >21µm	ASTM D7647 >40	<b>10</b>	38	14
Particles >38µm	ASTM D7647 >10	<b>0</b>	1	1
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/14	<b>▲ 23/21/14</b>	▲ 23/21/15	▲ 24/21/14



# OIL ANALYSIS REPORT

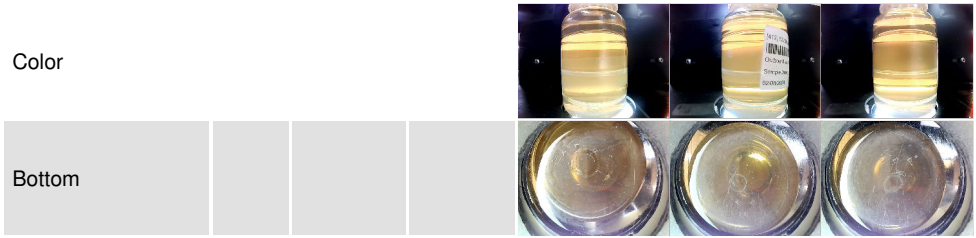


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.40	<b>0.41</b>	0.35	0.37

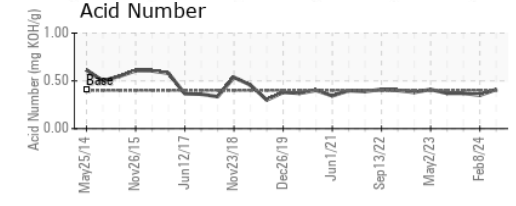
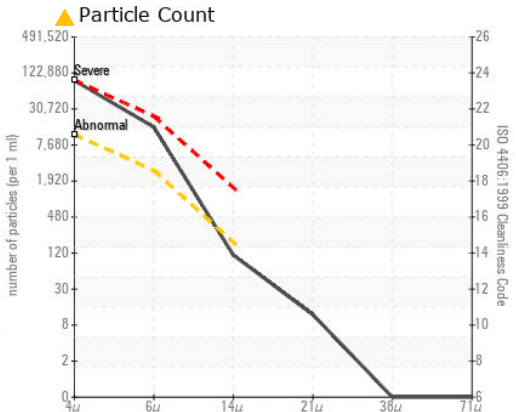
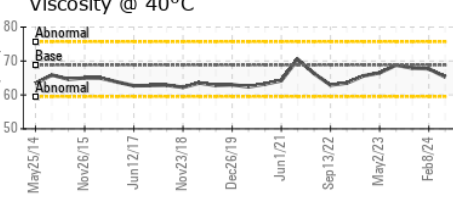
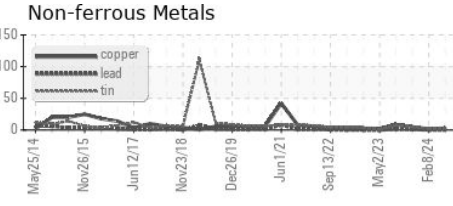
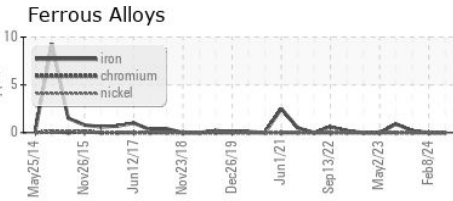
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>2	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68.8	<b>65.3</b>	67.7	67.9

### SAMPLE IMAGES



### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0479428  
**Lab Number** : **06123540**  
**Unique Number** : 10937691  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**BRIDGESTONE FIRESTONE - DES MOINES**  
 4600 NW 2ND AVE  
 DES MOINES, IA  
 US 50313

**Received** : 20 Mar 2024  
**Tested** : 25 Mar 2024  
**Diagnosed** : 25 Mar 2024 - Jonathan Hester  
 To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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 CarterScottA@FirestoneAg.com  
 T: x:  
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