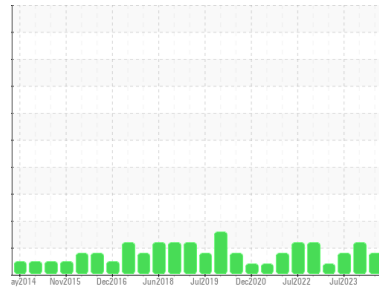




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**412**  
 Machine Id  
**273 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. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate 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>WC0838926</b>	WC0838936	WC0640599
Sample Date	Client Info			<b>28 Mar 2024</b>	10 Nov 2023	05 Jul 2023
Machine Age	hrs	Client Info		<b>0</b>	6	6
Oil Age	hrs	Client Info		<b>720</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ATTENTION</b>	ABNORMAL	ATTENTION

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>9</b>	6	12
Iron	ppm	ASTM D5185m	>60	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>4	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m	>250	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>125	<b>&lt;1</b>	<1	4
Tin	ppm	ASTM D5185m	>80	<b>2</b>	4	5
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

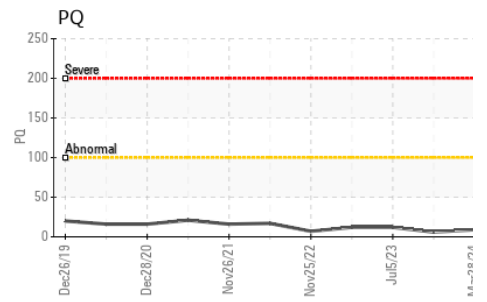
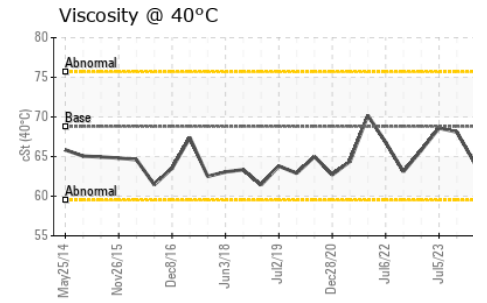
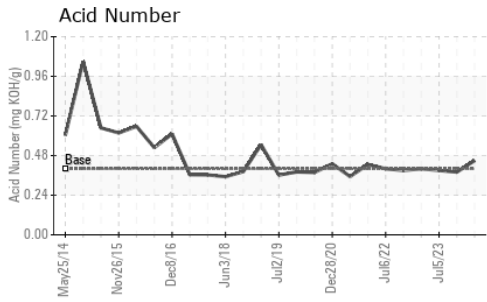
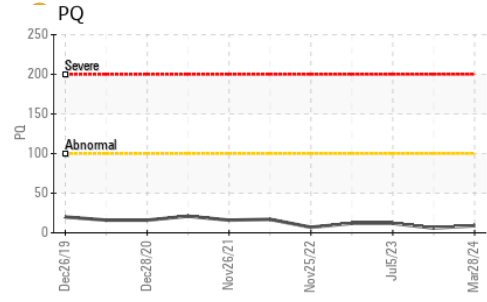
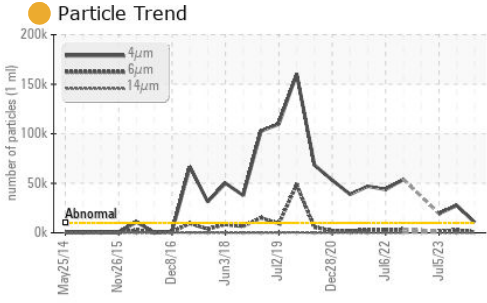
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0	<b>0</b>	6	0
Molybdenum	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	5	<b>5</b>	1	0
Calcium	ppm	ASTM D5185m	50	<b>58</b>	51	60
Phosphorus	ppm	ASTM D5185m	330	<b>311</b>	338	434
Zinc	ppm	ASTM D5185m	420	<b>411</b>	418	561
Sulfur	ppm	ASTM D5185m	3100	<b>5718</b>	3217	3957

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>5</b>	3	11
Sodium	ppm	ASTM D5185m		<b>0</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	<b>10577</b>	27554	19513
Particles >6µm		ASTM D7647	>2500	<b>1004</b>	2781	1530
Particles >14µm		ASTM D7647	>160	<b>24</b>	102	33
Particles >21µm		ASTM D7647	>40	<b>6</b>	34	9
Particles >38µm		ASTM D7647	>10	<b>0</b>	3	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	1
Oil Cleanliness		ISO 4406 (c)	>20/18/14	<b>21/17/12</b>	22/19/14	21/18/12



# OIL ANALYSIS REPORT

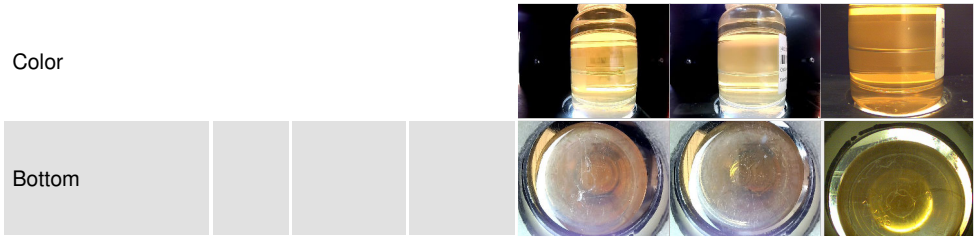


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.40	<b>0.45</b>	0.38	0.39

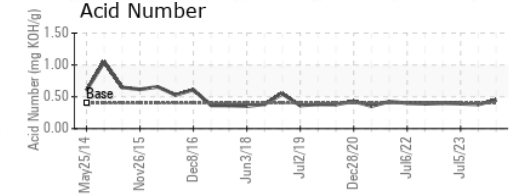
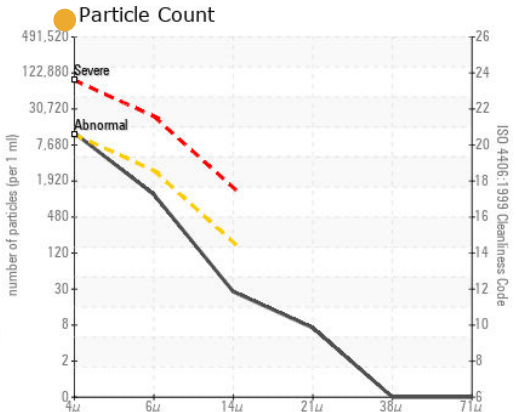
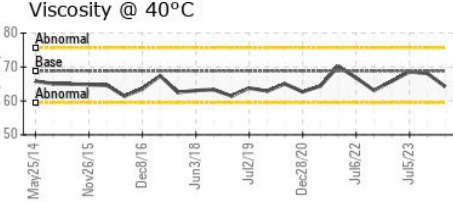
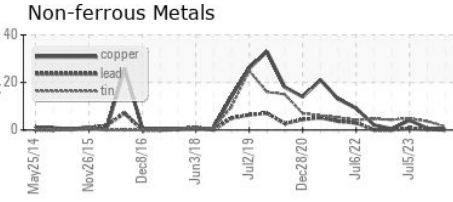
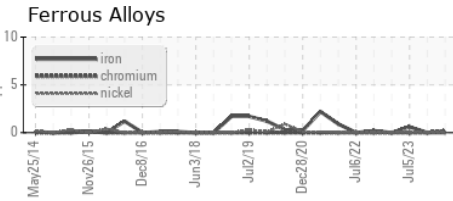
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	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>64.2</b>	68.1	68.6

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0838926  
**Lab Number** : **06138435**  
**Unique Number** : 10963243  
**Test Package** : IND 2 ( Additional Tests: PQ, PrtCount )

**BRIDGESTONE FIRESTONE - DES MOINES**  
 4600 NW 2ND AVE  
 DES MOINES, IA 50313  
 Contact: SCOTT CARTER  
 CarterScottA@FirestoneAg.com

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)