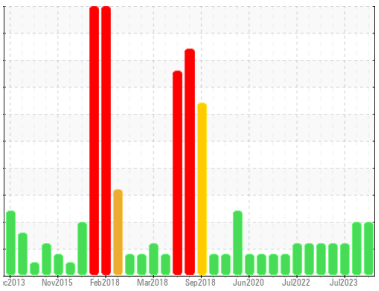
PROBLEM SUMMARY

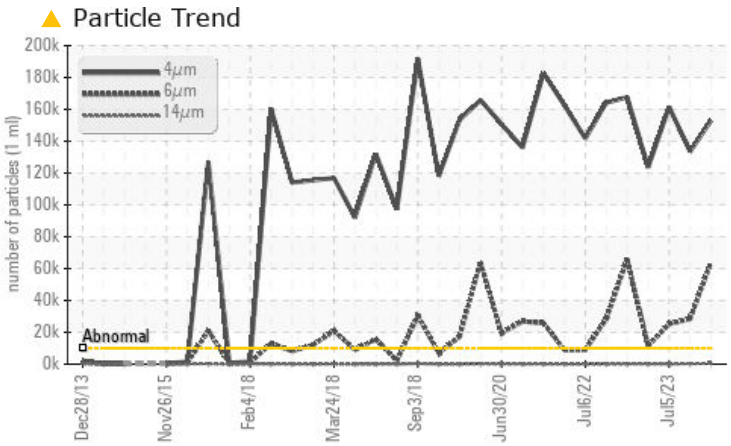
Sample Rating Trend



ISO

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Particles >4µm		ASTM D7647	>10000	▲ **152985**	▲ 133581	▲ 161477
Particles >6µm		ASTM D7647	>2500	▲ **63911**	▲ 28391	▲ 25144
Particles >14µm		ASTM D7647	>160	▲ **508**	▲ 326	77
Particles >21µm		ASTM D7647	>40	▲ **61**	▲ 64	9
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **24/23/16**	▲ 24/22/16	▲ 25/22/13

Customer Id: BRIDES
Sample No.: WC0838890
Lab Number: 06009527
Test Package: IND 2

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

07 Aug 2023 Diag: Doug Bogart

ISO

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

05 Jul 2023 Diag: Angela Borella

ISO

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

09 Apr 2023 Diag: Don Baldridge

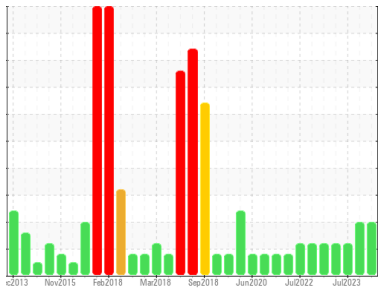
ISO

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ISO

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

DIAGNOSIS

Recommendation
No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is a high amount of particulates present in the oil.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0838890**	WC0397548	WC0569514
Sample Date		Client Info		**10 Nov 2023**	07 Aug 2023	05 Jul 2023
Machine Age	mths	Client Info		**6**	1	6
Oil Age	mths	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>2	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**16**	10	13
Iron	ppm	ASTM D5185m	>60	**<1**	0	<1
Chromium	ppm	ASTM D5185m	>20	**0**	0	0
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>4	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>250	**7**	<1	2
Copper	ppm	ASTM D5185m	>125	**8**	8	13
Tin	ppm	ASTM D5185m	>80	**32**	27	37
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

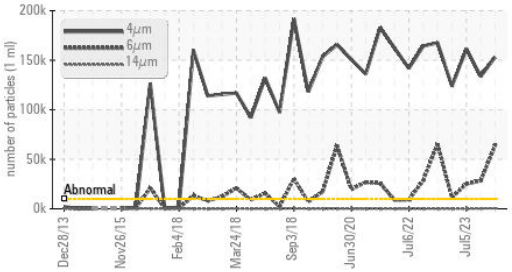
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**0**	0	0
Barium	ppm	ASTM D5185m	0	**7**	<1	0
Molybdenum	ppm	ASTM D5185m	0	**0**	<1	<1
Manganese	ppm	ASTM D5185m		**0**	<1	0
Magnesium	ppm	ASTM D5185m	5	**<1**	7	0
Calcium	ppm	ASTM D5185m	50	**42**	43	38
Phosphorus	ppm	ASTM D5185m	330	**323**	324	331
Zinc	ppm	ASTM D5185m	420	**394**	398	415
Sulfur	ppm	ASTM D5185m	3100	**3236**	3081	3150

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**2**	2	2
Sodium	ppm	ASTM D5185m		**0**	2	0
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	<1

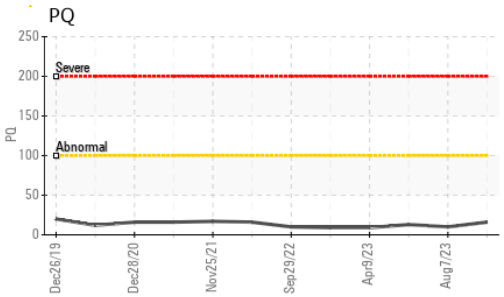
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ **152985**	▲ 133581	▲ 161477
Particles >6µm	ASTM D7647	>2500	▲ **63911**	▲ 28391	▲ 25144
Particles >14µm	ASTM D7647	>160	▲ **508**	▲ 326	77
Particles >21µm	ASTM D7647	>40	▲ **61**	▲ 64	9
Particles >38µm	ASTM D7647	>10	**1**	1	0
Particles >71µm	ASTM D7647	>3	**0**	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ **24/23/16**	▲ 24/22/16	▲ 25/22/13

OIL ANALYSIS REPORT

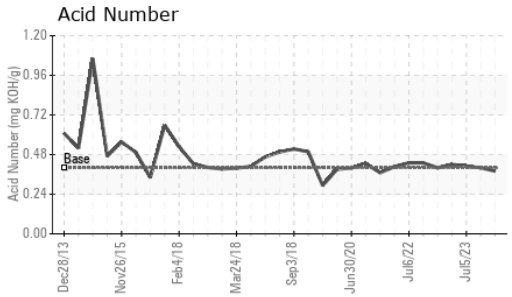
Particle Trend



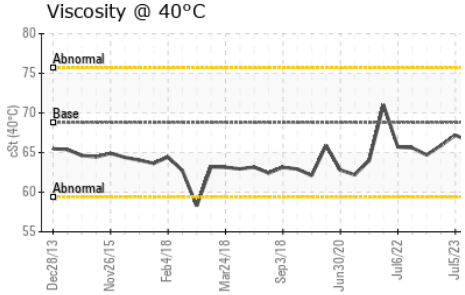
PQ



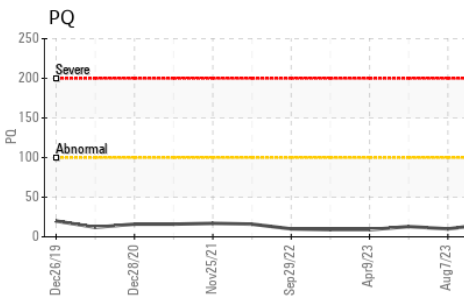
Acid Number



Viscosity @ 40°C



PQ



FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.40	**0.38**	0.40	0.41

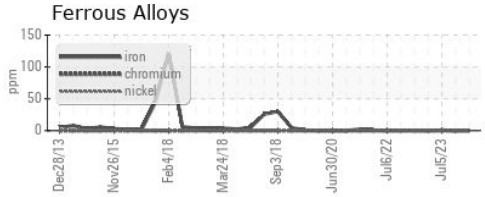
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	68.8	**66.2**	66.4	67.2

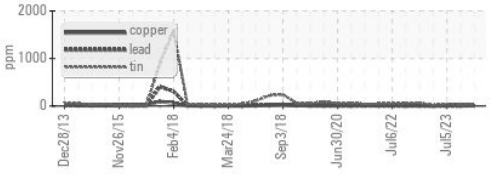
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

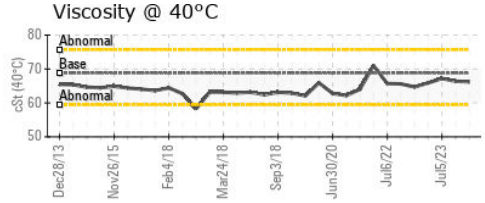
Ferrous Alloys



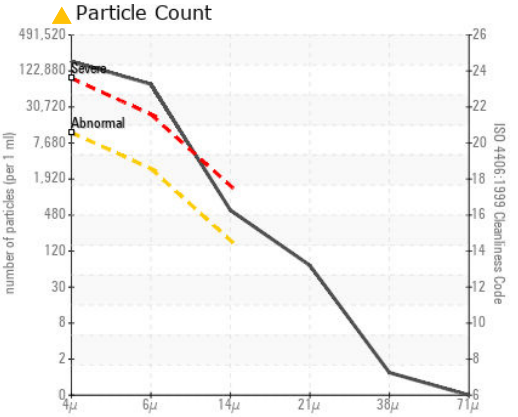
Non-ferrous Metals



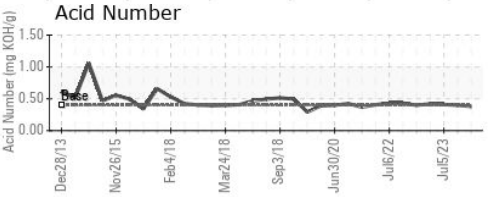
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0838890 **Received** : 16 Nov 2023
Lab Number : 06009527 **Diagnosed** : 20 Nov 2023
Unique Number : 10743289 **Diagnostician** : Don Baldridge
Test Package : IND 2 (Additional Tests: PQ, PrtCount)

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)

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