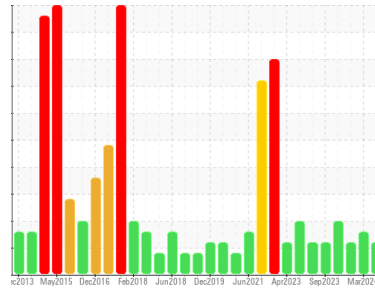




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
412
 Machine Id
71 BANBURY MOTOR
 Component
Inboard 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		WC0912098	WC0479426	WC0838870
Sample Date	Client Info		09 Apr 2024	05 Mar 2024	15 Feb 2024
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	624	400	0
Oil Changed	Client Info		Changed	Changed	N/A
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		15	15	14
Iron	ppm	ASTM D5185m >60	0	<1	0
Chromium	ppm	ASTM D5185m >20	0	<1	0
Nickel	ppm	ASTM D5185m >20	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >4	0	1	<1
Lead	ppm	ASTM D5185m >250	<1	2	3
Copper	ppm	ASTM D5185m >125	0	3	3
Tin	ppm	ASTM D5185m >80	16	23	25
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 5	1	2	5
Calcium	ppm	ASTM D5185m 50	51	43	56
Phosphorus	ppm	ASTM D5185m 330	342	276	346
Zinc	ppm	ASTM D5185m 420	412	349	449
Sulfur	ppm	ASTM D5185m 3100	3510	2579	4830

CONTAMINANTS

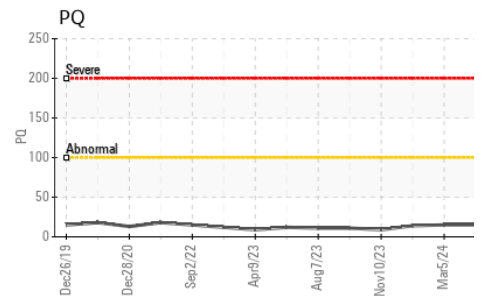
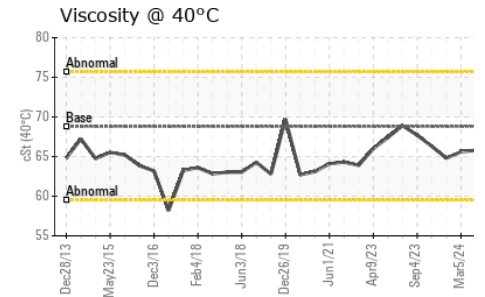
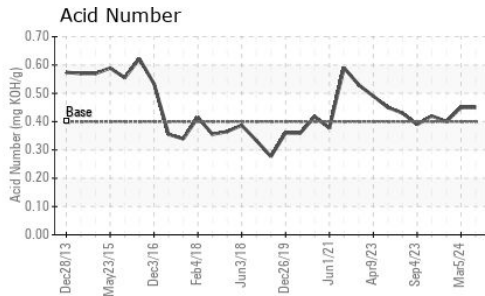
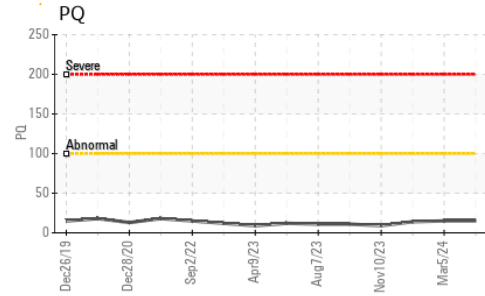
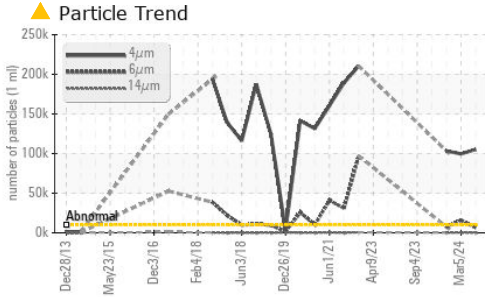
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	4	2	1
Sodium	ppm	ASTM D5185m	0	1	1
Potassium	ppm	ASTM D5185m >20	0	<1	2

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ 105210	▲ 99601	▲ 103339
Particles >6µm	ASTM D7647	>2500	▲ 6700	▲ 15979	▲ 7353
Particles >14µm	ASTM D7647	>160	81	▲ 249	136
Particles >21µm	ASTM D7647	>40	12	40	21
Particles >38µm	ASTM D7647	>10	1	1	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	▲ 24/20/14	▲ 24/21/15	▲ 24/20/14



OIL ANALYSIS REPORT

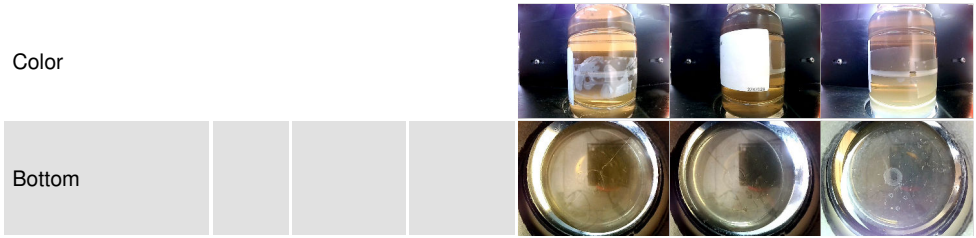


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	.40	0.45	0.45	0.40

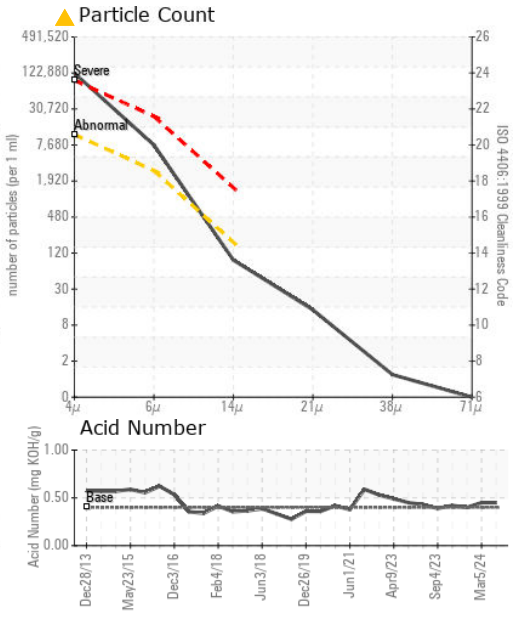
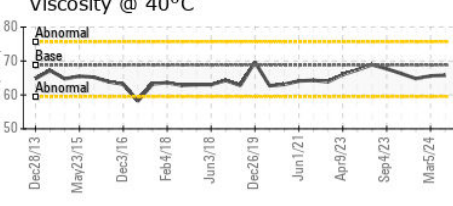
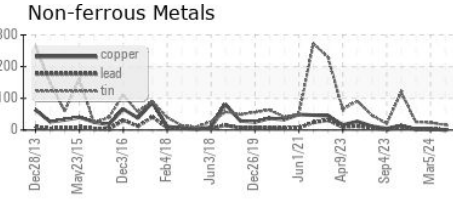
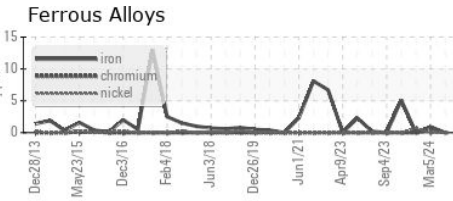
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE	NONE
Sand/Dirt	scalar	*Visual	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	65.8	65.6	64.8

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0912098 **Received** : 15 Apr 2024
Lab Number : **06148546** **Tested** : 16 Apr 2024
Unique Number : 10978624 **Diagnosed** : 17 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: PQ, PrtCont)

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)