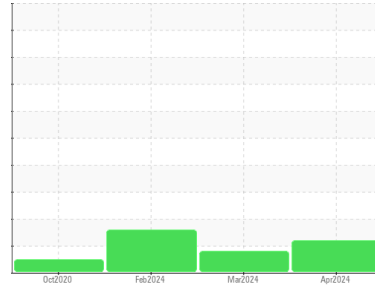




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
412
 Machine Id
71 Banbury Gearbox
 Component
Gearbox
 Fluid
MOBIL MOBILGEAR SHC 460 (40 GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0912089	WC0912158	WC0838908
Sample Date	Client Info			09 Apr 2024	11 Mar 2024	28 Feb 2024
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	27
Oil Changed	Client Info			Not Changed	Not Changd	Not Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		21	19	15
Iron	ppm	ASTM D5185m	>200	2	<1	6
Chromium	ppm	ASTM D5185m	>15	0	<1	0
Nickel	ppm	ASTM D5185m	>15	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	<1	0
Lead	ppm	ASTM D5185m	>100	0	7	0
Copper	ppm	ASTM D5185m	>200	0	2	3
Tin	ppm	ASTM D5185m	>25	0	0	0
Antimony	ppm	ASTM D5185m	>5	---	---	---
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

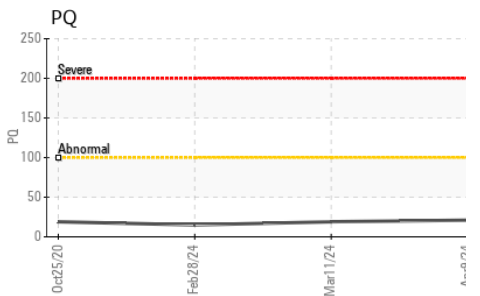
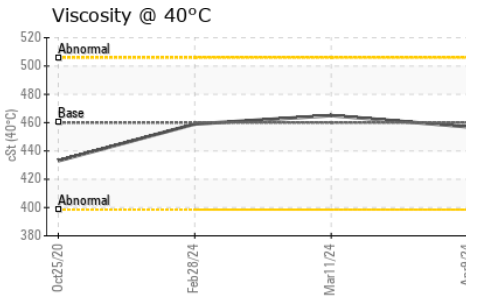
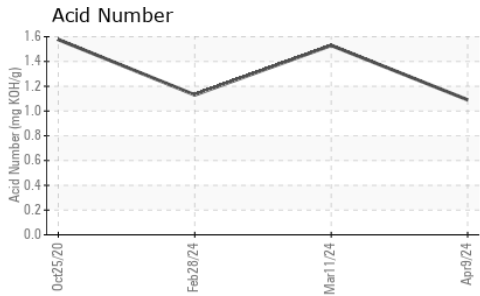
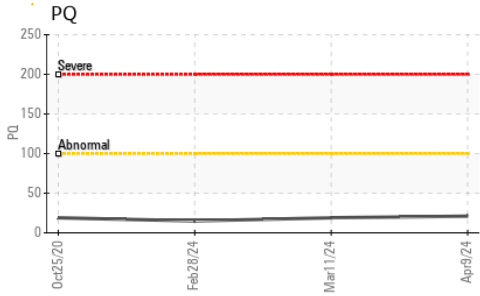
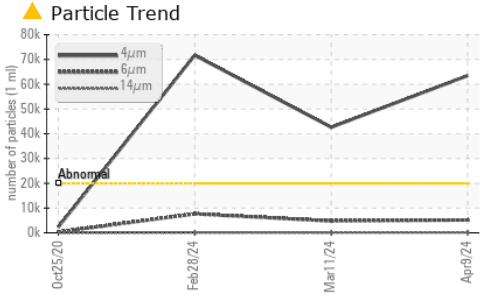
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		1	<1	4
Calcium	ppm	ASTM D5185m		3	2	20
Phosphorus	ppm	ASTM D5185m		446	476	481
Zinc	ppm	ASTM D5185m		0	1	4
Sulfur	ppm	ASTM D5185m		2490	2740	2463

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	13	7	14
Sodium	ppm	ASTM D5185m		0	<1	<1
Potassium	ppm	ASTM D5185m	>20	0	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	▲ 63471	▲ 42621	▲ 71701
Particles >6µm		ASTM D7647	>5000	● 5176	4779	● 7637
Particles >14µm		ASTM D7647	>640	83	51	113
Particles >21µm		ASTM D7647	>160	15	9	21
Particles >38µm		ASTM D7647	>40	2	1	2
Particles >71µm		ASTM D7647	>10	0	0	1
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 23/20/14	▲ 23/19/13	▲ 23/20/14



OIL ANALYSIS REPORT

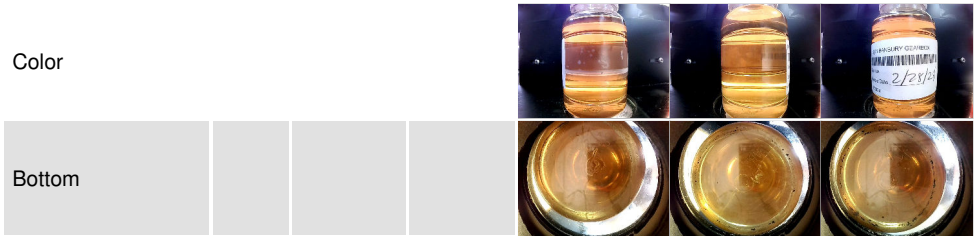


FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.09	1.53	1.13

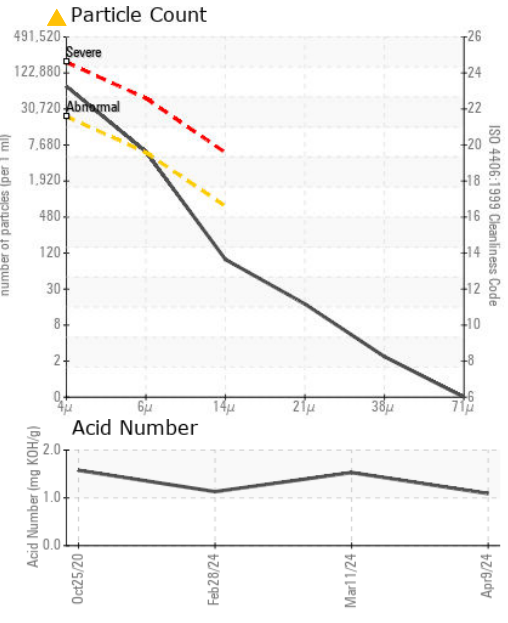
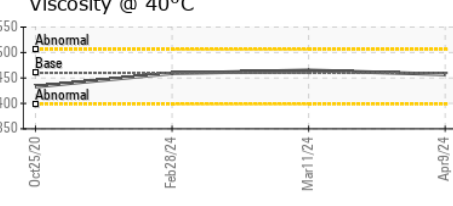
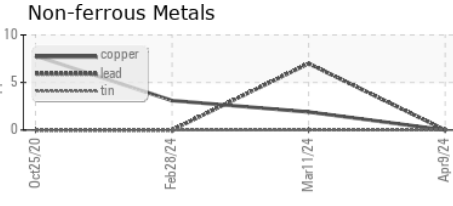
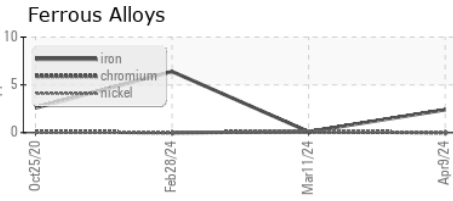
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	460	457	465	459

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0912089 **Received** : 15 Apr 2024
Lab Number : **06148545** **Tested** : 16 Apr 2024
Unique Number : 10978623 **Diagnosed** : 16 Apr 2024 - Wes Davis
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)

T: x:
F: x: