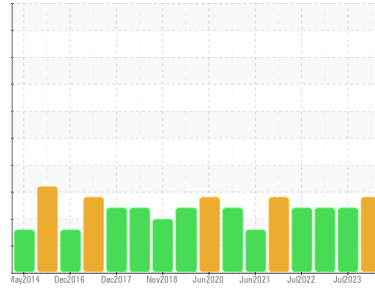




# PROBLEM SUMMARY

Sample Rating Trend



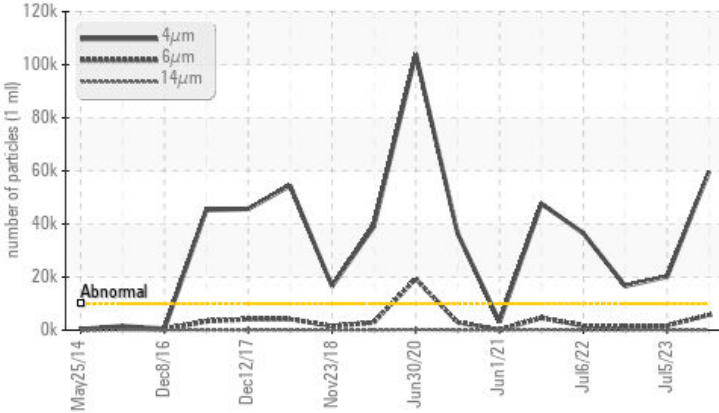
DIRT



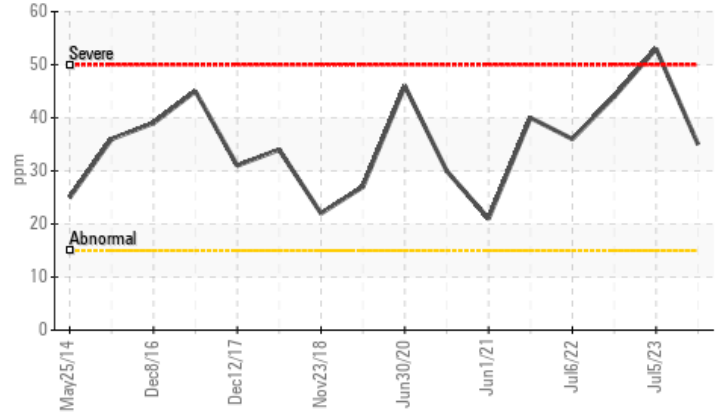
Area  
**412**  
 Machine Id  
**622 AIRVAYOR**  
 Component  
**Outboard Bearing**  
 Fluid  
**MOBIL SHC 630 (10 GAL)**

## COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Silicon (ppm)



## 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.

## PROBLEMATIC TEST RESULTS

Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL
Silicon	ppm	ASTM D5185m >15	▲ <b>35</b>	▲ 53	▲ 44
Particles >4µm		ASTM D7647 >10000	▲ <b>59764</b>	▲ 20182	▲ 16639
Particles >6µm		ASTM D7647 >2500	▲ <b>5718</b>	1701	1209
Oil Cleanliness		ISO 4406 (c) >20/18/14	▲ <b>23/20/13</b>	▲ 22/18/13	▲ 21/17/12

Customer Id: BRIDES  
 Sample No.: WC0838895  
 Lab Number: 06009528  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 05 Jul 2023 Diag: Angela Borella

DIRT



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 < 6 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 30 Dec 2022 Diag: Angela Borella

DIRT



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 moderate amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 06 Jul 2022 Diag: Doug Bogart

DIRT



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 < 6 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

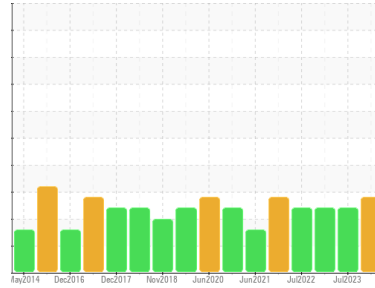
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area  
**412**  
 Machine Id  
**622 AIRVAYOR**  
 Component  
**Outboard Bearing**  
 Fluid  
**MOBIL SHC 630 (10 GAL)**

## 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 high amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

### 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>WC0838895</b>	WC0569523	WC0640559
Sample Date	Client Info		<b>10 Nov 2023</b>	05 Jul 2023	30 Dec 2022
Machine Age	mths	Client Info	<b>6</b>	6	6
Oil Age	mths	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184		<b>7</b>	7	16
Iron	ppm	ASTM D5185m >20	<b>4</b>	2	2
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 >20	<b>&lt;1</b>	<1	0
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	0
Tin	ppm	ASTM D5185m >20	<b>2</b>	0	2
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	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>6</b>	0	1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m	<b>2</b>	0	0
Phosphorus	ppm	ASTM D5185m	<b>432</b>	471	455
Zinc	ppm	ASTM D5185m	<b>3</b>	<1	4
Sulfur	ppm	ASTM D5185m	<b>0</b>	0	0

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<b>▲ 35</b>	▲ 53	▲ 44
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	<1	<1

## FLUID CLEANLINESS

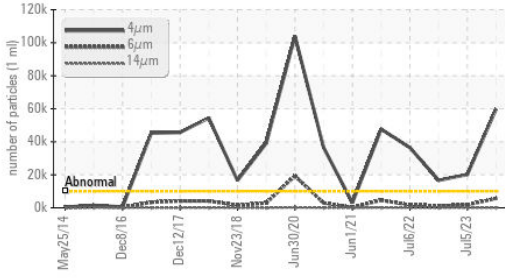
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 59764</b>	▲ 20182	▲ 16639
Particles >6µm	ASTM D7647	>2500	<b>▲ 5718</b>	1701	1209
Particles >14µm	ASTM D7647	>160	<b>60</b>	42	31
Particles >21µm	ASTM D7647	>40	<b>9</b>	7	6
Particles >38µm	ASTM D7647	>10	<b>1</b>	1	1
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	<b>▲ 23/20/13</b>	▲ 22/18/13	▲ 21/17/12

## FLUID DEGRADATION

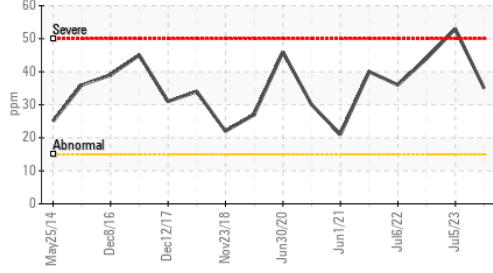
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.55</b>	0.63	0.57

# OIL ANALYSIS REPORT

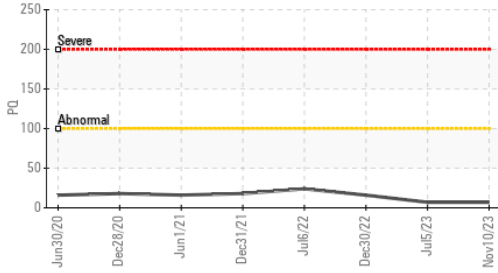
### ▲ Particle Trend



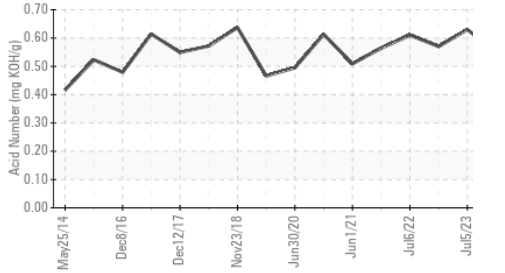
### ▲ Silicon (ppm)



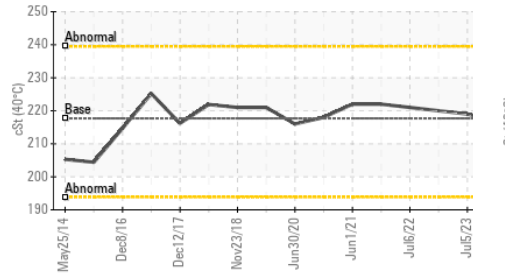
### ▲ PQ



### Acid Number



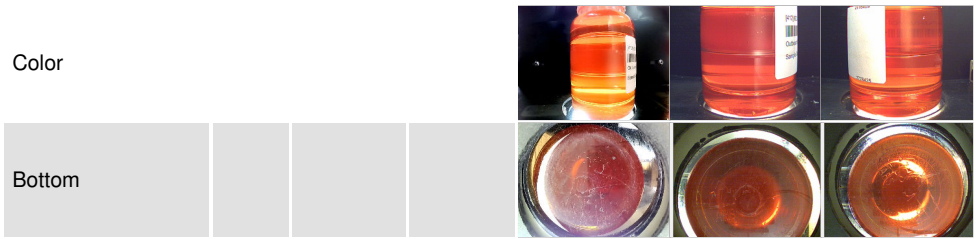
### Viscosity @ 40°C



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	>2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

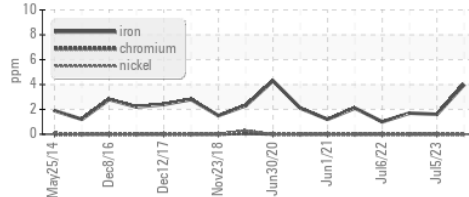
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	217	219	220

SAMPLE IMAGES	method	limit/base	current	history1	history2
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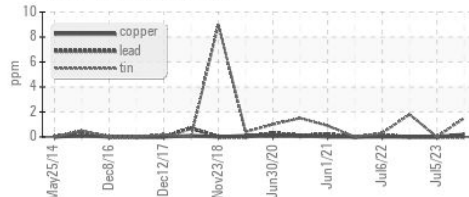


### GRAPHS

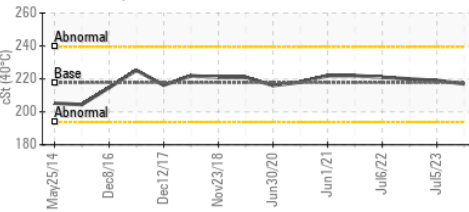
#### Ferrous Alloys



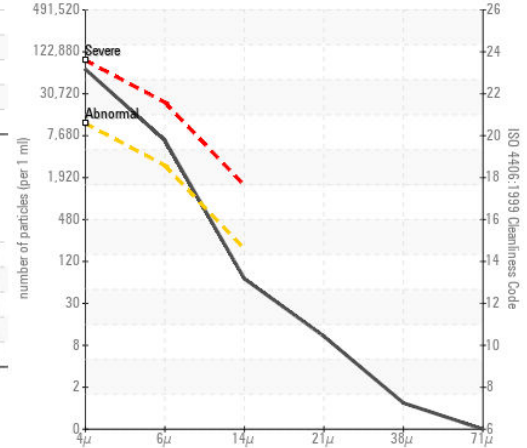
#### Non-ferrous Metals



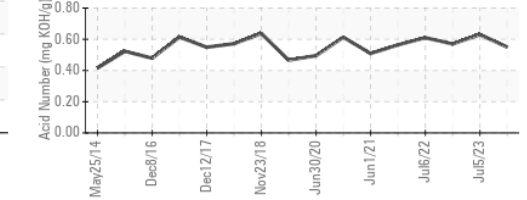
#### Viscosity @ 40°C



#### ▲ Particle Count



#### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0838895 **Received** : 16 Nov 2023  
**Lab Number** : 06009528 **Diagnosed** : 19 Nov 2023  
**Unique Number** : 10743290 **Diagnostician** : Don Baldrige

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