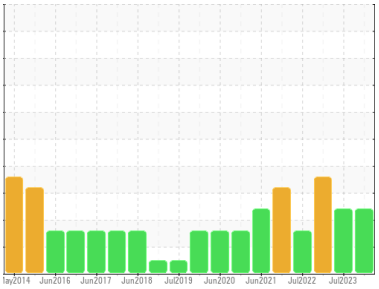
PROBLEM SUMMARY

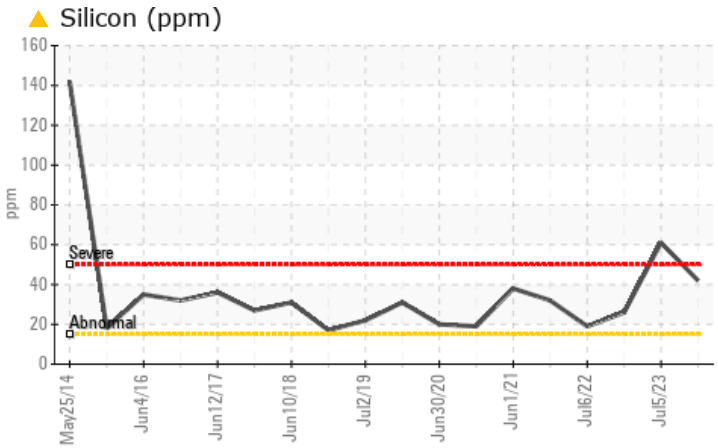
Area
412
Machine Id
621 AIRVAYOR
Component
Outboard Bearing
Fluid
MOBIL SHC 630 (10 GAL)

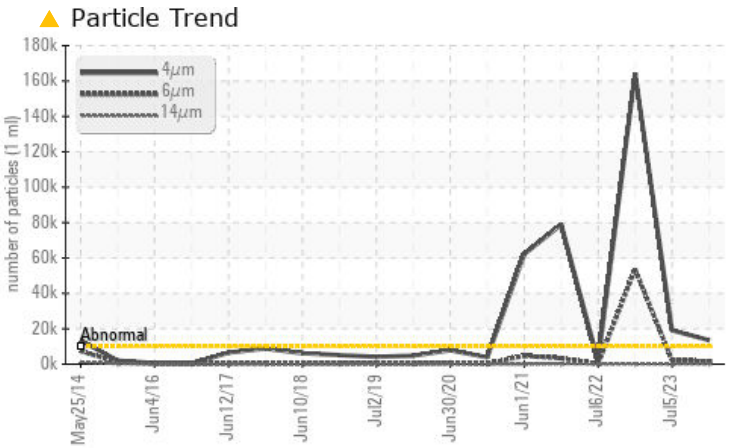
Sample Rating Trend



DIRT

COMPONENT CONDITION SUMMARY





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				**ABNORMAL**	ABNORMAL	ABNORMAL
Silicon	ppm	ASTM D5185m	>15	▲ **42**	▲ 61	▲ 26
Particles >4µm		ASTM D7647	>10000	▲ **13544**	▲ 19113	▲ 164236
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **21/18/12**	▲ 21/18/12	▲ 25/23/14

Customer Id: BRIDES
Sample No.: WC0838897
Lab Number: 06009531
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

05 Jul 2023 Diag: Angela Borella

DIRT

No corrective action is recommended at this time. 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

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.The iron level is abnormal. All other 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 acceptable for the time in service.

view report

06 Jul 2022 Diag: Doug Bogart

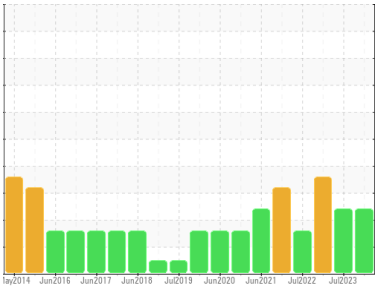
DIRT

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. Elemental level of silicon (Si) above normal indicating ingress of seal material. The amount and size of particulates present in the system are acceptable. 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
621 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 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.

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		**WC0838897**	WC0640613	WC0640580
Sample Date		Client Info		**10 Nov 2023**	05 Jul 2023	30 Dec 2022
Machine Age	mths	Client Info		**6**	6	6
Oil Age	mths	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	N/A	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**14**	14	27
Iron	ppm	ASTM D5185m	>20	**2**	3	▲ 84
Chromium	ppm	ASTM D5185m	>20	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>20	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>20	**0**	<1	0
Copper	ppm	ASTM D5185m	>20	**0**	0	<1
Tin	ppm	ASTM D5185m	>20	**0**	0	3
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		**7**	0	1
Molybdenum	ppm	ASTM D5185m		**0**	<1	0
Manganese	ppm	ASTM D5185m		**0**	<1	<1
Magnesium	ppm	ASTM D5185m		**<1**	0	<1
Calcium	ppm	ASTM D5185m		**1**	0	<1
Phosphorus	ppm	ASTM D5185m		**450**	480	468
Zinc	ppm	ASTM D5185m		**0**	0	2
Sulfur	ppm	ASTM D5185m		**0**	0	4

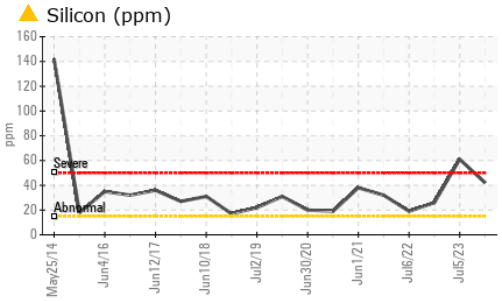
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **42**	▲ 61	▲ 26
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**<1**	<1	<1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	▲ **13544**	▲ 19113	▲ 164236
Particles >6µm		ASTM D7647	>2500	**1482**	2236	▲ 53568
Particles >14µm		ASTM D7647	>160	**22**	30	134
Particles >21µm		ASTM D7647	>40	**6**	5	36
Particles >38µm		ASTM D7647	>10	**3**	2	4
Particles >71µm		ASTM D7647	>3	**3**	2	0
Oil Cleanliness		ISO 4406 (c)	>20/18/14	▲ **21/18/12**	▲ 21/18/12	▲ 25/23/14

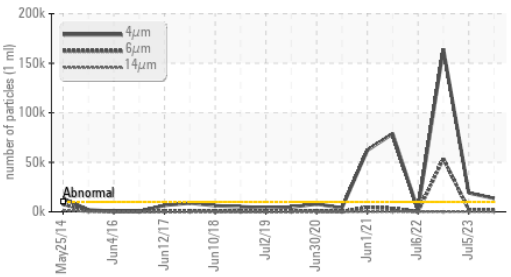
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.57**	0.58	0.58

OIL ANALYSIS REPORT

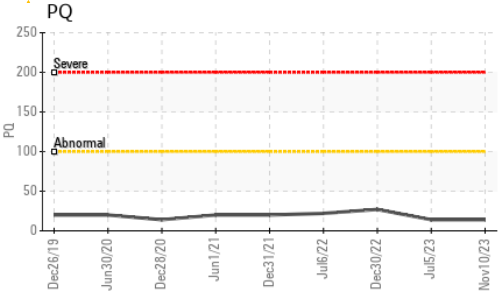
Silicon (ppm)



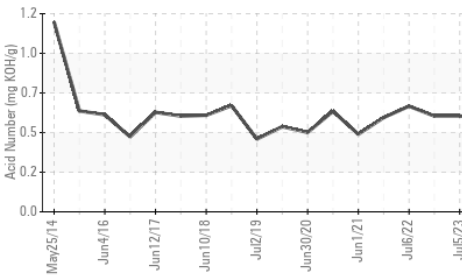
Particle Trend



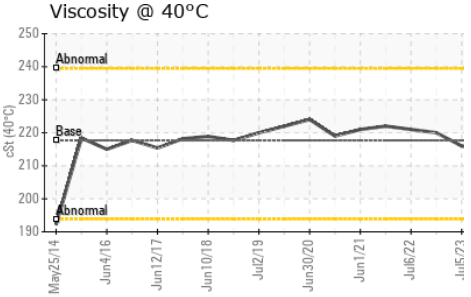
PQ



Acid Number

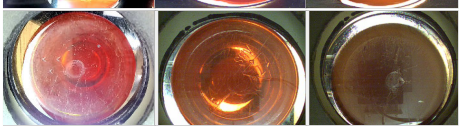


Viscosity @ 40°C



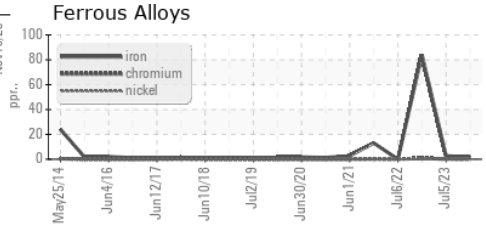
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	VLITE
Sand/Dirt	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	217.7	**215**	216	220

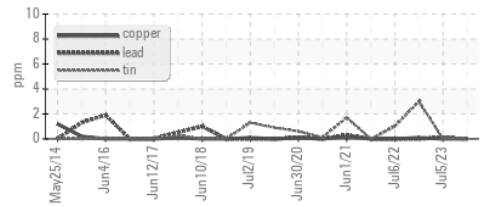
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

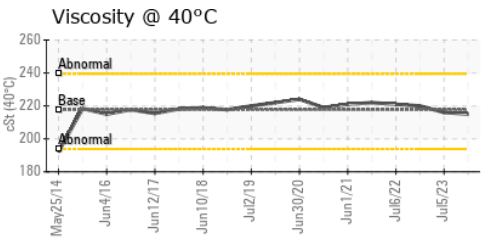
Ferrous Alloys



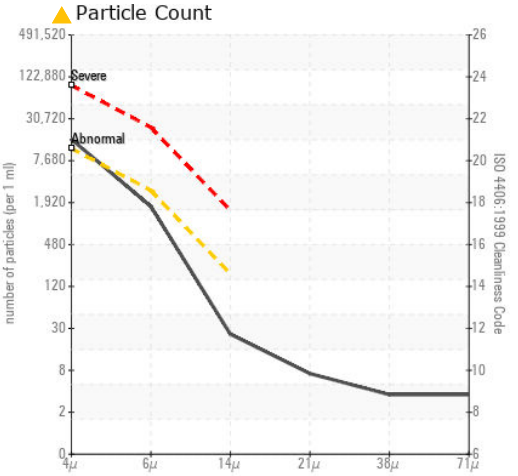
Non-ferrous Metals



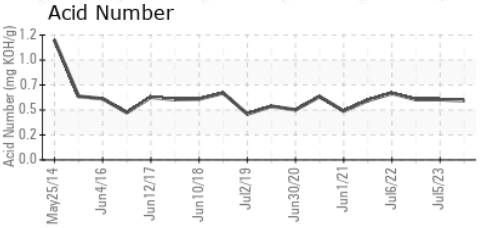
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0838897 **Received** : 16 Nov 2023
Lab Number : 06009531 **Diagnosed** : 19 Nov 2023
Unique Number : 10743293 **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)

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