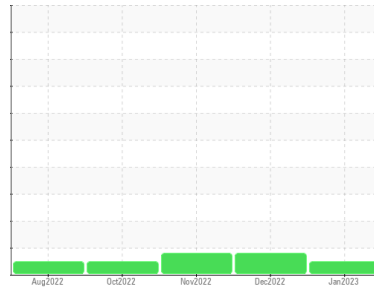




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
MERCURY MARINE

Component
Transmission (Auto)

Fluid
CASTROL TRANSMAX SYNTHETIC MV ATF (45 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the fluid.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0700557	WC0700552	WC0700547
Sample Date	Client Info		16 Jan 2023	01 Dec 2022	01 Nov 2022
Machine Age	mths	Client Info	0	0	0
Oil Age	mths	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >160	<1	<1	0
Chromium	ppm	ASTM D5185m >5	0	0	0
Nickel	ppm	ASTM D5185m >5	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >5	0	0	0
Aluminum	ppm	ASTM D5185m >50	2	2	<1
Lead	ppm	ASTM D5185m >50	0	0	<1
Copper	ppm	ASTM D5185m >225	<1	<1	0
Tin	ppm	ASTM D5185m >10	0	0	0
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 100	91	103	107
Barium	ppm	ASTM D5185m 0	15	6	6
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m 10	<1	0	0
Magnesium	ppm	ASTM D5185m 0	<1	2	0
Calcium	ppm	ASTM D5185m 370	76	74	73
Phosphorus	ppm	ASTM D5185m 300	219	229	206
Zinc	ppm	ASTM D5185m 0	14	16	<1
Sulfur	ppm	ASTM D5185m 1600	627	722	1129

CONTAMINANTS

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

FLUID CLEANLINESS

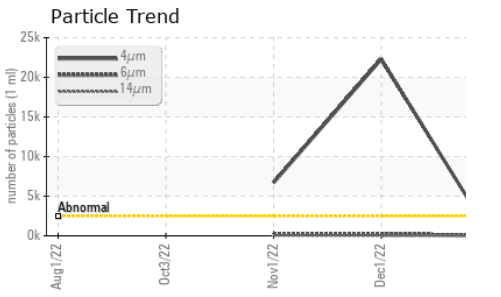
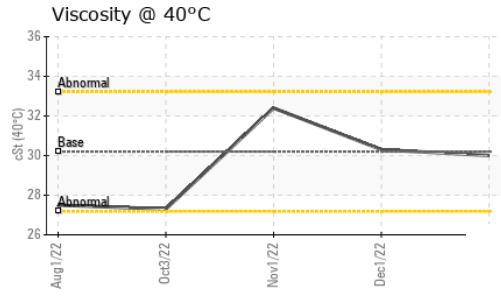
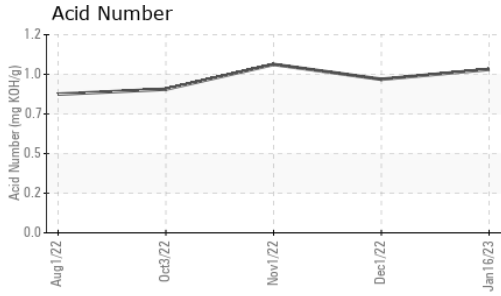
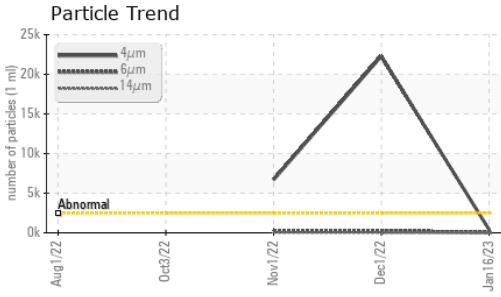
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	398	▲ 22281	▲ 6692
Particles >6µm	ASTM D7647	>640	54	235	295
Particles >14µm	ASTM D7647	>80	11	6	32
Particles >21µm	ASTM D7647	>20	2	2	8
Particles >38µm	ASTM D7647	>4	0	0	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	16/13/11	▲ 22/15/10	▲ 20/15/12

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.99	0.93	1.02



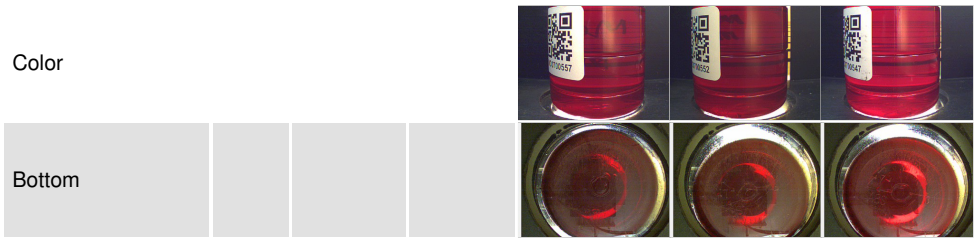
OIL ANALYSIS REPORT



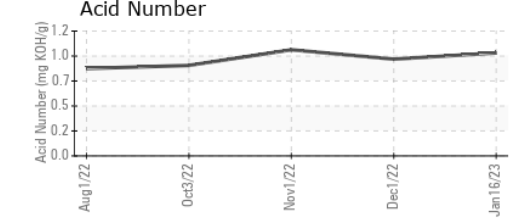
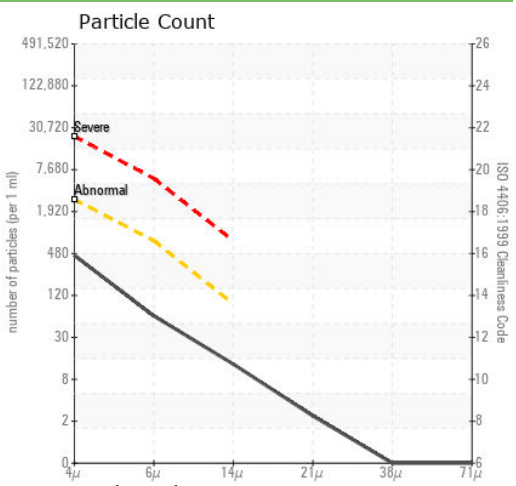
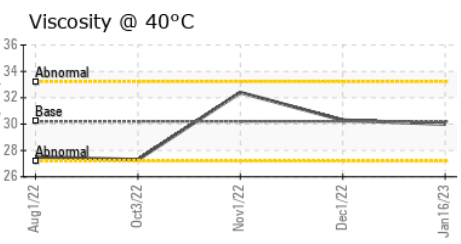
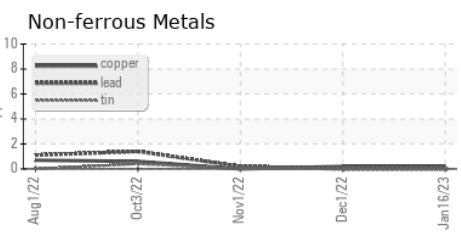
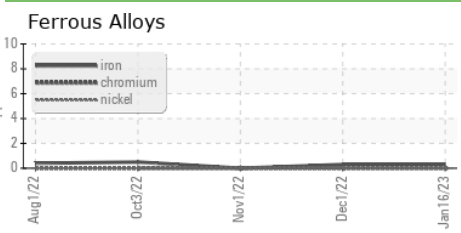
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 30.2	30.0	30.3	32.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0700557 **Received** : 17 Jan 2023
Lab Number : **05741411** **Diagnosed** : 18 Jan 2023
Unique Number : 10296010 **Diagnostician** : Don Baldrige
Test Package : PLANT

HAWE HYDRAULICS - HUNTERSVILLE
 13020 JAMESBURG DR SUITE A
 HUNTERSVILLE, NC
 US 28078
 Contact: Kristina Smith
 k.smith@hawe.com
 T: (704)927-5610
 F: (704)509-6302

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)