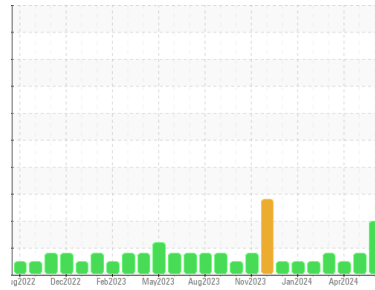




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
MERCURY MARINE

Component
Transmission (Auto)

Fluid
CASTROL TRANSMAX SYNTHETIC MV ATF (45 GAL)

DIAGNOSIS

Recommendation

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 particulates present 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		WC0921226	WC0921221	WC0921216
Sample Date	Client Info		03 Jun 2024	01 May 2024	01 Apr 2024
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			ATTENTION	ATTENTION	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >160	0	<1	1
Chromium	ppm	ASTM D5185m >5	<1	0	<1
Nickel	ppm	ASTM D5185m >5	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >5	0	0	<1
Aluminum	ppm	ASTM D5185m >50	4	5	5
Lead	ppm	ASTM D5185m >50	<1	0	2
Copper	ppm	ASTM D5185m >225	<1	<1	1
Tin	ppm	ASTM D5185m >10	<1	0	1
Vanadium	ppm	ASTM D5185m	0	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 100	95	94	87
Barium	ppm	ASTM D5185m 0	29	37	34
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m 10	0	<1	<1
Magnesium	ppm	ASTM D5185m 0	<1	<1	2
Calcium	ppm	ASTM D5185m 370	71	73	80
Phosphorus	ppm	ASTM D5185m 300	208	207	238
Zinc	ppm	ASTM D5185m 0	6	0	10
Sulfur	ppm	ASTM D5185m 1600	895	996	954

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	1	1	2
Sodium	ppm	ASTM D5185m	3	3	3
Potassium	ppm	ASTM D5185m >20	1	<1	2

FLUID CLEANLINESS

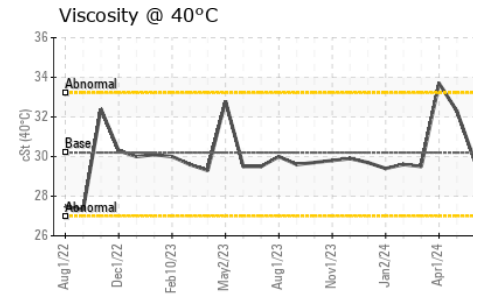
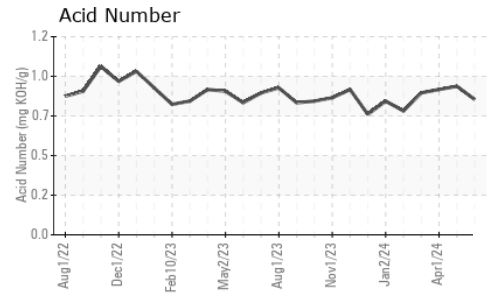
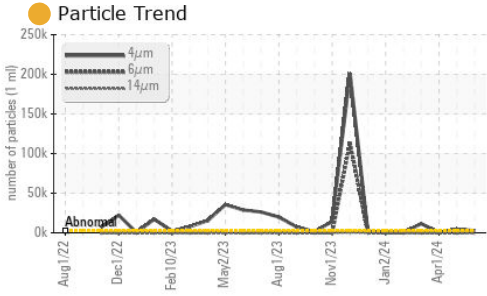
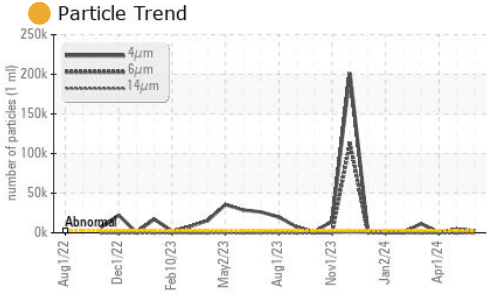
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	2731	4573	489
Particles >6µm	ASTM D7647	>640	877	114	105
Particles >14µm	ASTM D7647	>80	96	6	9
Particles >21µm	ASTM D7647	>20	24	1	1
Particles >38µm	ASTM D7647	>4	2	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	19/17/14	19/14/10	16/14/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.82	0.90	0.88



OIL ANALYSIS REPORT

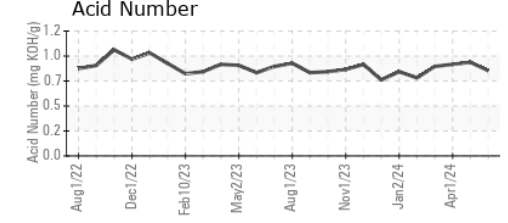
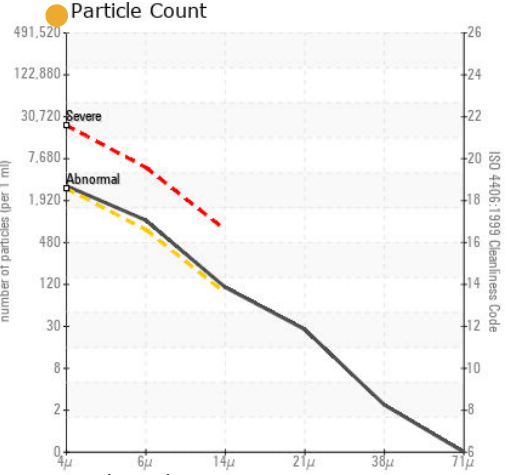
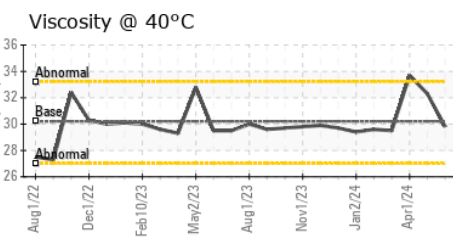
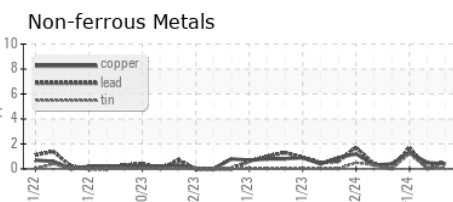
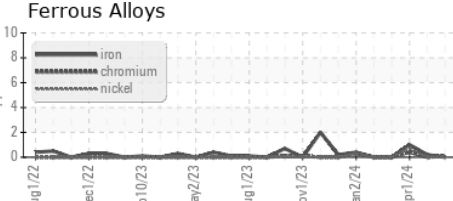


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	29.8	32.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0921226 **Received** : 04 Jun 2024
Lab Number : 06199078 **Tested** : 05 Jun 2024
Unique Number : 11061201 **Diagnosed** : 06 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: PrtCount)

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)