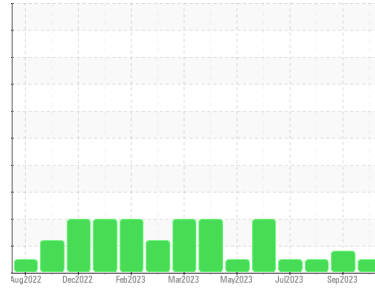




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
VOLVO

Component
Transmission (Auto)

Fluid
CASTROL TRANSMAX SYNTHETIC MV ATF (28 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 oil.

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		WC0791125	WC0791120	WC0791114
Sample Date	Client Info		02 Oct 2023	07 Sep 2023	01 Aug 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	ATTENTION	NORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 100	107	102	97
Barium	ppm	ASTM D5185m 0	27	15	28
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m 10	0	0	<1
Magnesium	ppm	ASTM D5185m 0	<1	0	0
Calcium	ppm	ASTM D5185m 370	72	70	76
Phosphorus	ppm	ASTM D5185m 300	193	203	200
Zinc	ppm	ASTM D5185m 0	2	0	0
Sulfur	ppm	ASTM D5185m 1600	929	938	988

CONTAMINANTS

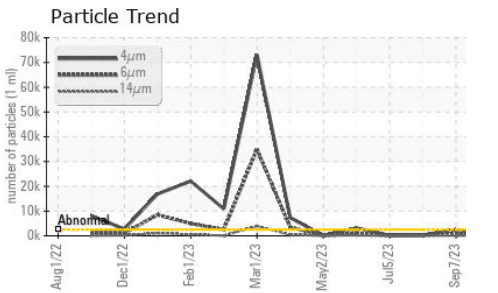
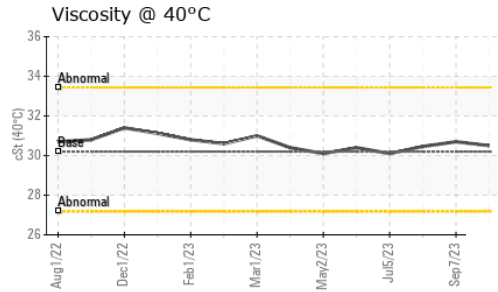
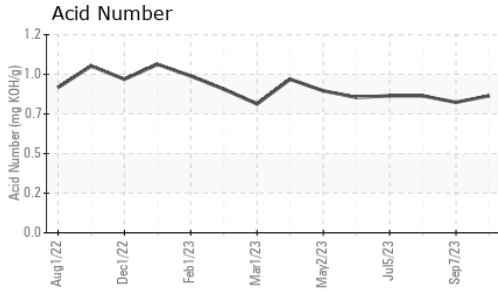
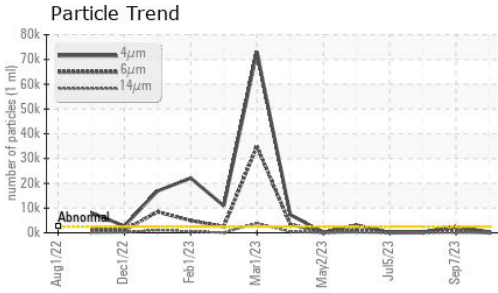
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	1	<1	<1
Sodium	ppm	ASTM D5185m	3	2	3
Potassium	ppm	ASTM D5185m >20	<1	0	0

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	367	2419	338
Particles >6µm	ASTM D7647	>640	128	▲ 1051	155
Particles >14µm	ASTM D7647	>80	23	71	16
Particles >21µm	ASTM D7647	>20	7	11	4
Particles >38µm	ASTM D7647	>4	1	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>18/16/13	16/14/12	▲ 18/17/13	16/14/11

FLUID DEGRADATION

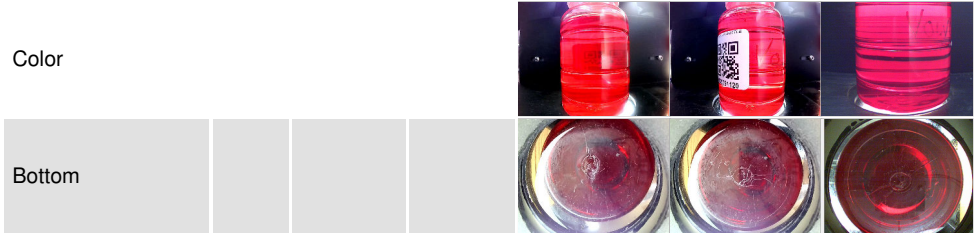
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.83	0.79	0.83



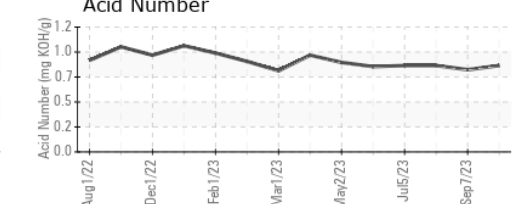
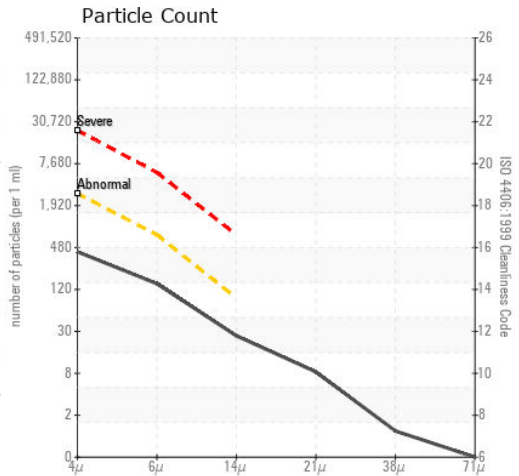
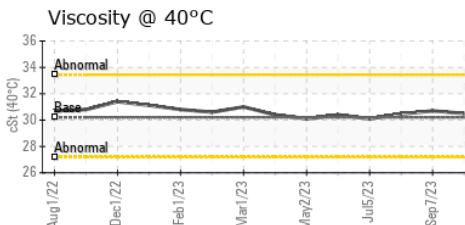
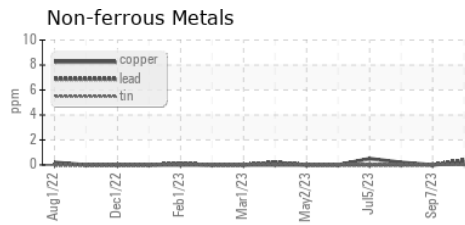
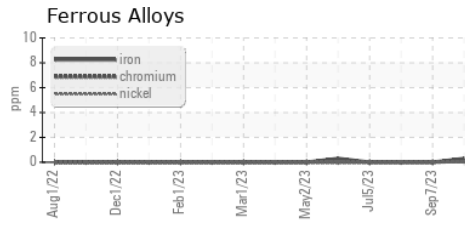
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	30.5	30.7

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. : WC0791125 Received : 04 Oct 2023
 Lab Number : 05968915 Diagnosed : 06 Oct 2023
 Unique Number : 10675466 Diagnostician : Don Baldrige
 Test Package : IND 2 (Additional Tests: PrtCount)

HAWE HYDRAULICS - HUNTERVILLE
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 HUNTERVILLE, 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)