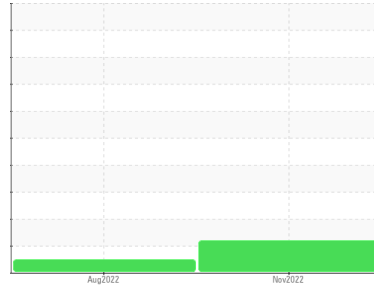




PROBLEM SUMMARY

Sample Rating Trend



ISO



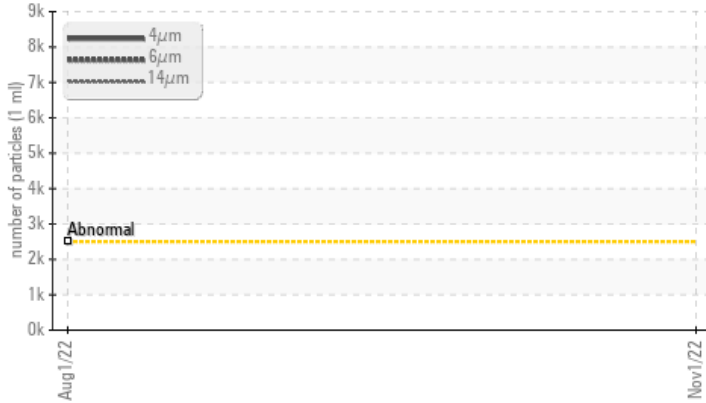
Machine Id
VOLVO

Component
Transmission (Auto)

Fluid
CASTROL TRANSMAX SYNTHETIC MV ATF (28 GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry update for target ISO.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	NORMAL	---
Particles >4µm	ASTM D7647	>2500	▲ 8119	---	---
Particles >6µm	ASTM D7647	>640	▲ 1426	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/18/13	---	---

Customer Id: HAWCHANC
Sample No.: WC0700546
Lab Number: 05682715
Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	MISSED	Dec 06 2022	?	We recommend you service the filters on this component if applicable.

HISTORICAL DIAGNOSIS

01 Aug 2022 Diag: Jonathan Hester

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the fluid. The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

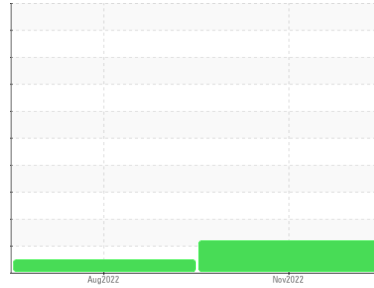
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
VOLVO

Component
Transmission (Auto)

Fluid
CASTROL TRANSMAX SYNTHETIC MV ATF (28 GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. Please note that this is a corrected copy for data entry update for target ISO.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of silt (particulates < 14 microns in size) 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	WC0700546	WC0700535	---
Sample Date	Client Info	01 Nov 2022	01 Aug 2022	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	0	---
Oil Changed	Client Info	N/A	N/A	---
Sample Status		ABNORMAL	NORMAL	---

WEAR METALS

method	limit/base	current	history1	history2	
PQ	ASTM D8184	7	---	---	
Iron	ppm	ASTM D5185m >200	0	0	---
Chromium	ppm	ASTM D5185m >10	0	0	---
Nickel	ppm	ASTM D5185m	0	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	<1	---
Aluminum	ppm	ASTM D5185m >50	<1	3	---
Lead	ppm	ASTM D5185m >50	0	0	---
Copper	ppm	ASTM D5185m >200	0	<1	---
Tin	ppm	ASTM D5185m >10	0	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 100	111	111	---
Barium	ppm	ASTM D5185m 0	42	34	---
Molybdenum	ppm	ASTM D5185m 0	0	0	---
Manganese	ppm	ASTM D5185m 10	0	0	---
Magnesium	ppm	ASTM D5185m 0	0	0	---
Calcium	ppm	ASTM D5185m 370	82	93	---
Phosphorus	ppm	ASTM D5185m 300	207	209	---
Zinc	ppm	ASTM D5185m 0	0	2	---
Sulfur	ppm	ASTM D5185m 1600	1145	983	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >50	<1	<1	---
Sodium	ppm	ASTM D5185m	<1	2	---
Potassium	ppm	ASTM D5185m >20	0	0	---

FLUID CLEANLINESS

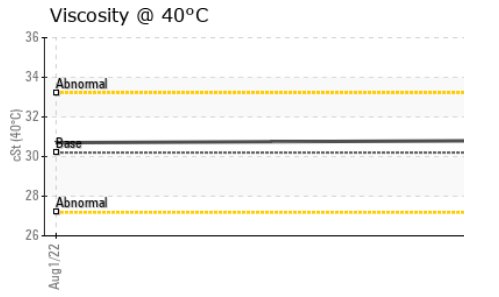
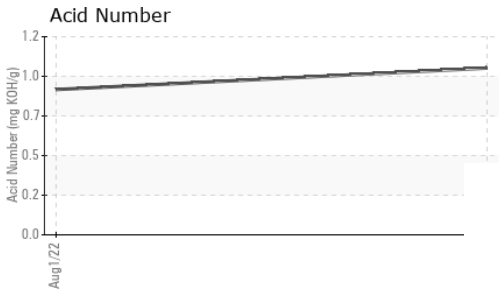
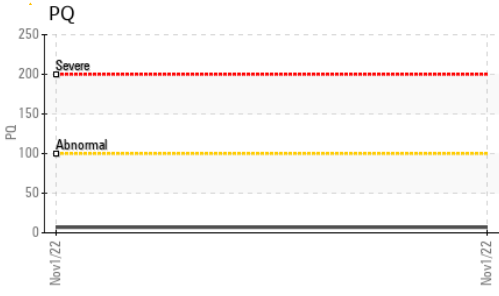
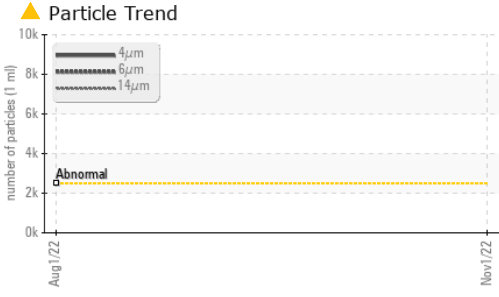
method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>2500	▲ 8119	---	---
Particles >6µm	ASTM D7647	>640	▲ 1426	---	---
Particles >14µm	ASTM D7647	>80	59	---	---
Particles >21µm	ASTM D7647	>20	6	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/18/13	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	1.01	0.88	---



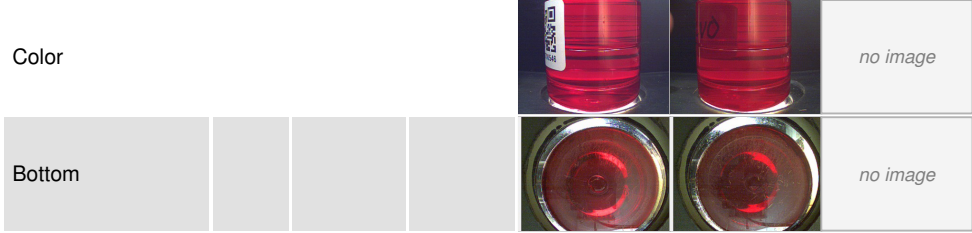
OIL ANALYSIS REPORT



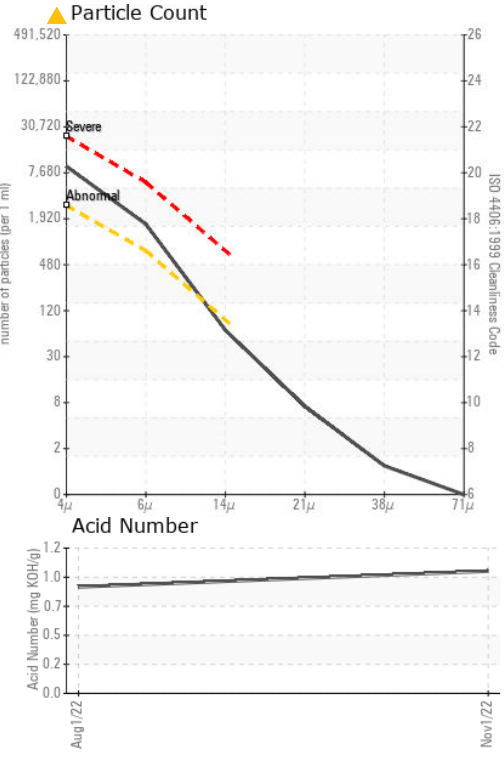
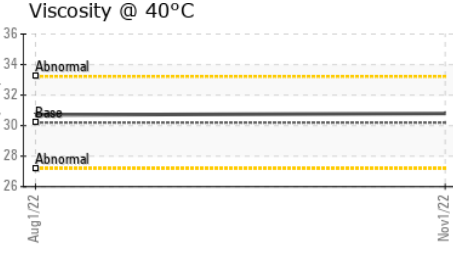
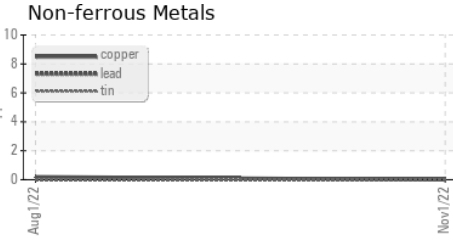
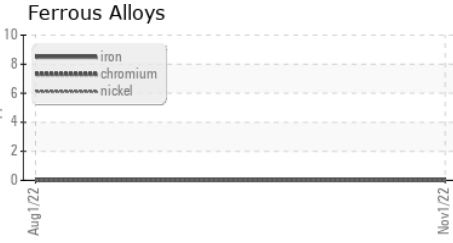
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	30.2	30.8	30.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0700546 **Received** : 02 Nov 2022
Lab Number : 05682715 **Diagnosed** : 08 Nov 2022
Unique Number : 10202287 **Diagnostician** : Doug Bogart
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

Certificate L2367
 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)