



# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**[W02008458]**  
 Machine Id  
**VOLVO ECR355 310021**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of particulates present 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			<b>ML0002413</b>	---	---
Sample Date	Client Info			<b>11 Jul 2024</b>	---	---
Machine Age	hrs	Client Info		<b>5994</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>ABNORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>10</b>	---	---
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>10	<b>3</b>	---	---
Lead	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Copper	ppm	ASTM D5185m	>75	<b>31</b>	---	---
Tin	ppm	ASTM D5185m	>10	<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

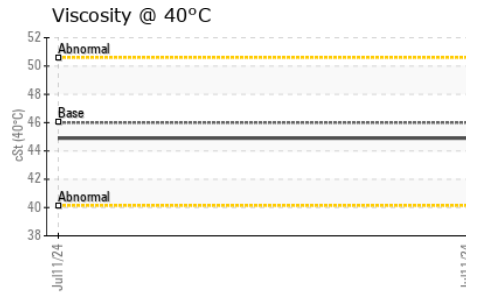
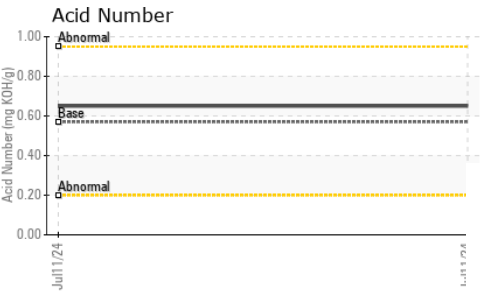
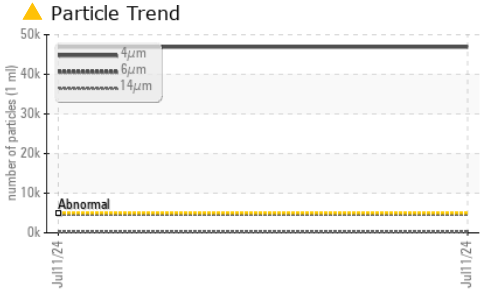
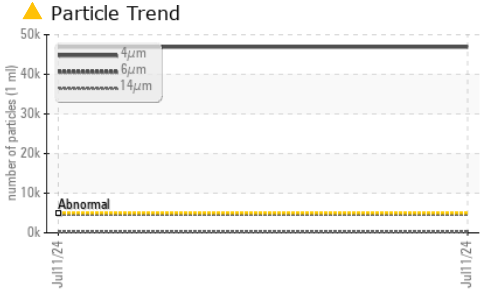
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	5	<b>70</b>	---	---
Barium	ppm	ASTM D5185m	5	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	5	<b>3</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	25	<b>25</b>	---	---
Calcium	ppm	ASTM D5185m	200	<b>2348</b>	---	---
Phosphorus	ppm	ASTM D5185m	300	<b>893</b>	---	---
Zinc	ppm	ASTM D5185m	370	<b>1058</b>	---	---
Sulfur	ppm	ASTM D5185m	2500	<b>5772</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	<b>12</b>	---	---
Sodium	ppm	ASTM D5185m		<b>6</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>▲ 46899</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>▲ 4763</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>▲ 163</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>38</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>1</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>▲ 23/19/15</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.65</b>	---	---

# OIL ANALYSIS REPORT



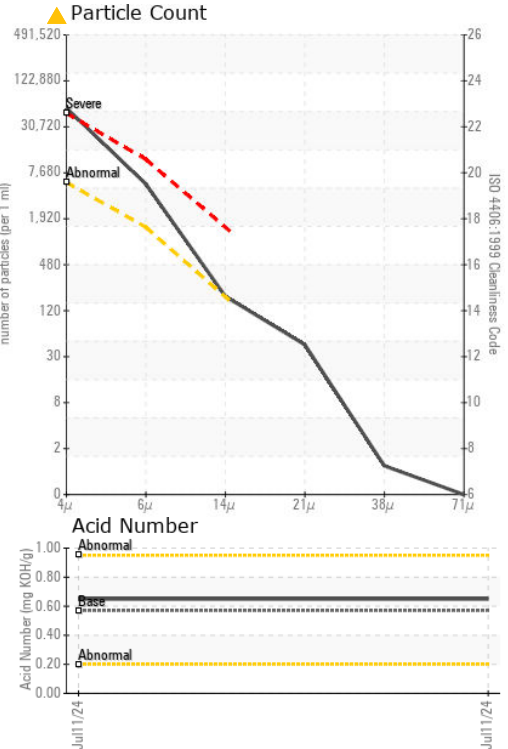
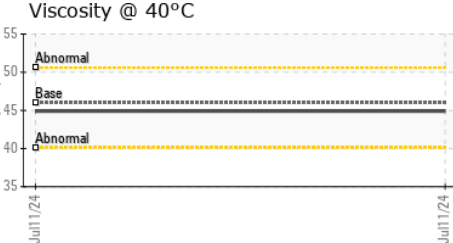
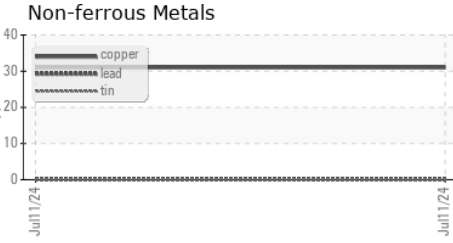
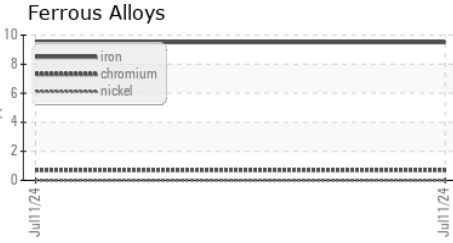
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	46	44.9	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ML0002413      **Received** : 15 Jul 2024  
**Lab Number** : 06236775      **Tested** : 17 Jul 2024  
**Unique Number** : 11125609      **Diagnosed** : 17 Jul 2024 - Don Baldrige  
**Test Package** : CONST

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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)