



OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**VOLVO EC300 3026 (S/N 313030)**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>CL0005053</b>	CL0004365	CL0003893
Sample Date		Client Info		<b>02 Jan 2024</b>	04 Jun 2023	11 Jan 2023
Machine Age	hrs	Client Info		<b>4470</b>	4155	2890
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<b>6</b>	6	8
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	1	1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>40</b>	36	35
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

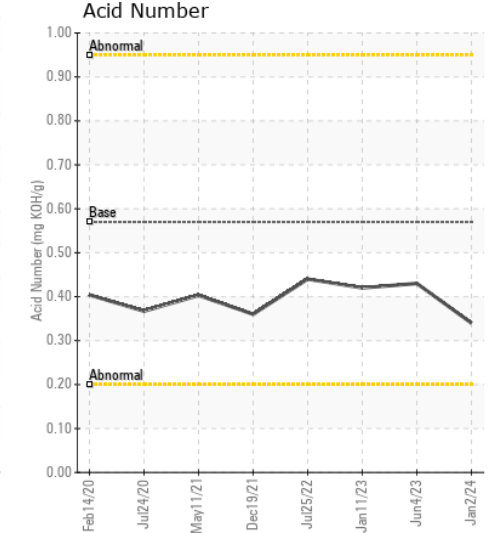
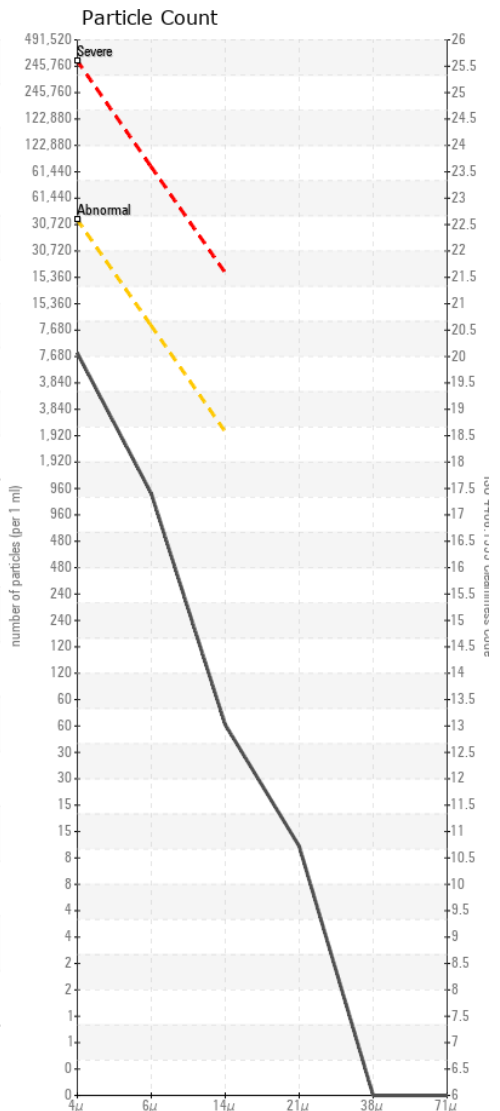
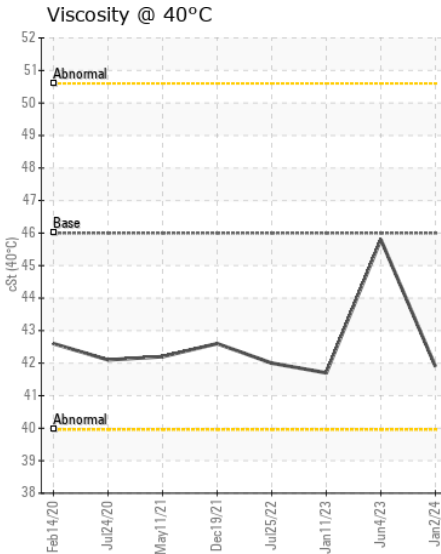
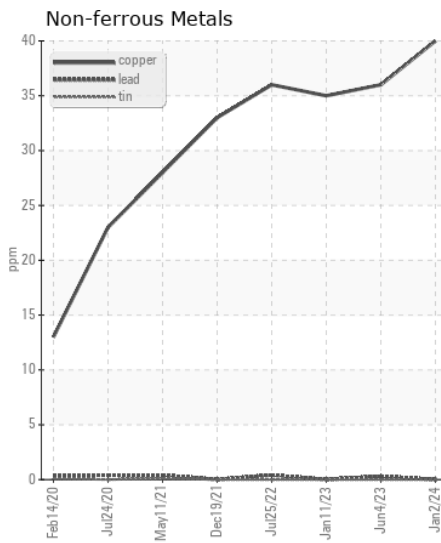
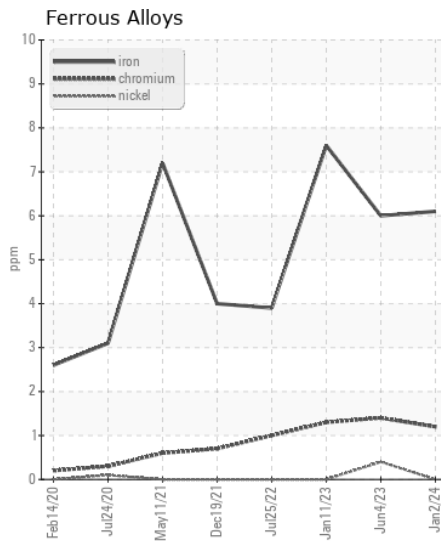
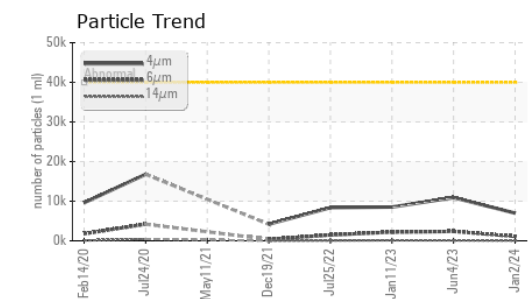
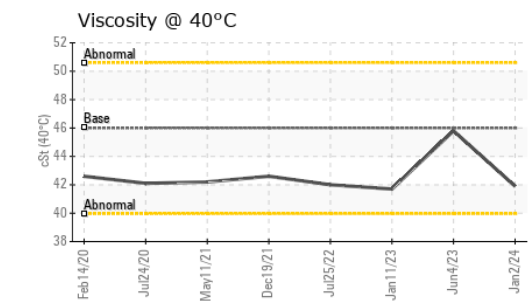
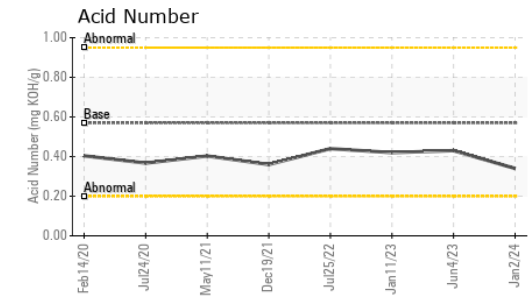
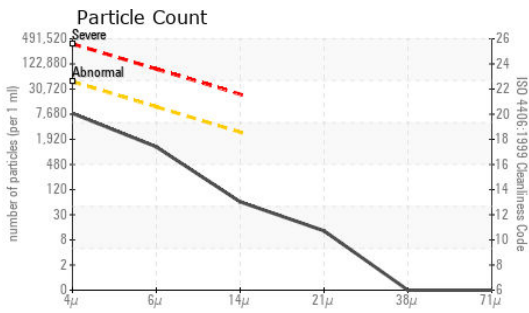
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	<b>4</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>40000	<b>6992</b>	10909	8528
Particles >6µm		ASTM D7647	>10000	<b>1113</b>	2372	2201
Particles >14µm		ASTM D7647	>2500	<b>54</b>	104	126
Particles >21µm		ASTM D7647	>640	<b>11</b>	20	21
Particles >38µm		ASTM D7647	>160	<b>0</b>	1	1
Particles >71µm		ASTM D7647	>40	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>20/17/13</b>	21/18/14	20/18/14
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>0</b>	0	<1
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	<1
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>4</b>	4	4
Calcium	ppm	ASTM D5185m	200	<b>61</b>	72	85
Phosphorus	ppm	ASTM D5185m	300	<b>359</b>	314	335
Zinc	ppm	ASTM D5185m	370	<b>382</b>	406	378
Sulfur	ppm	ASTM D5185m	2500	<b>947</b>	964	674
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.34</b>	0.43	0.42
Visc @ 40°C	cSt	ASTM D445	46	<b>41.9</b>	45.8	41.7



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : CL0005053 **Received** : 10 Jan 2024  
**Lab Number** : 06057332 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10823281 **Diagnostician** : Wes Davis  
**Test Package** : CONST

**PURCELL CONSTRUCTION**  
 3100 HIGH RIDGE RD  
 CHARLOTTE, NC  
 US 28270  
 Contact: BEN MILKE  
 ben@purcellconst.com  
 T:  
 F:

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)