



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO ECR145E 316243

Component
Hydraulic System

Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		VCP335173	---	---
Sample Date		Client Info		20 Dec 2023	---	---
Machine Age	hrs	Client Info		951	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>25	2	---	---
Chromium	ppm	ASTM D5185(m)	>10	<1	---	---
Nickel	ppm	ASTM D5185(m)	>10	0	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<1	---	---
Lead	ppm	ASTM D5185(m)	>20	1	---	---
Copper	ppm	ASTM D5185(m)	>150	20	---	---
Tin	ppm	ASTM D5185(m)	>10	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

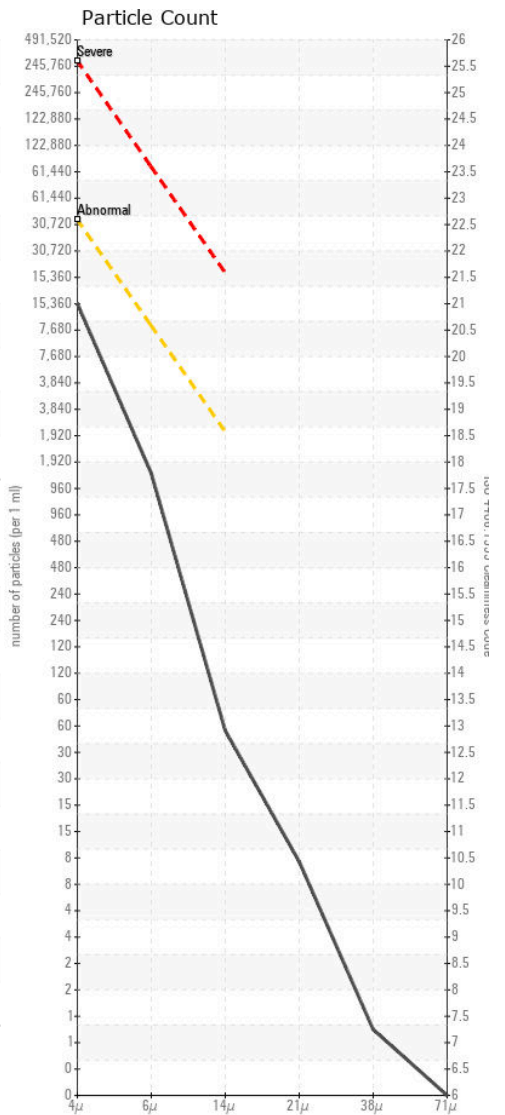
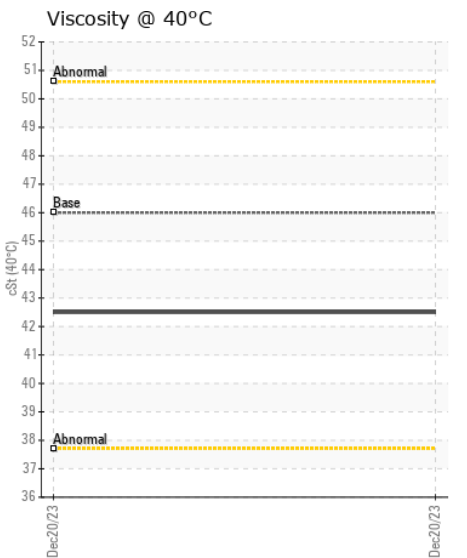
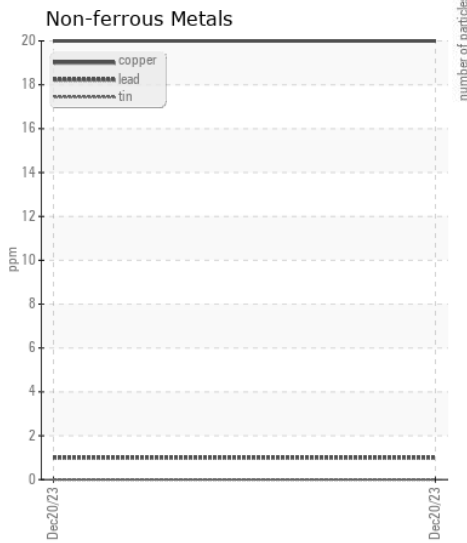
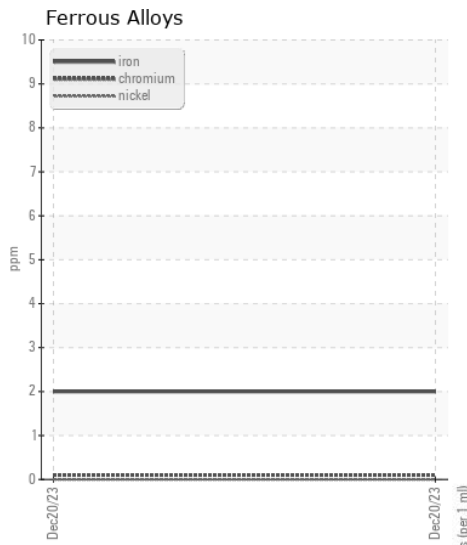
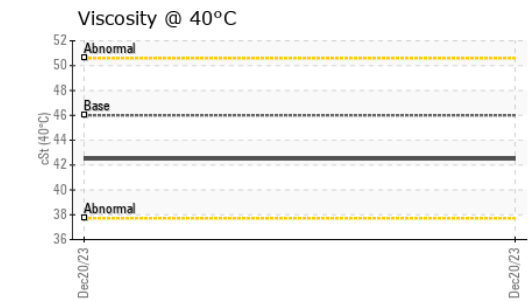
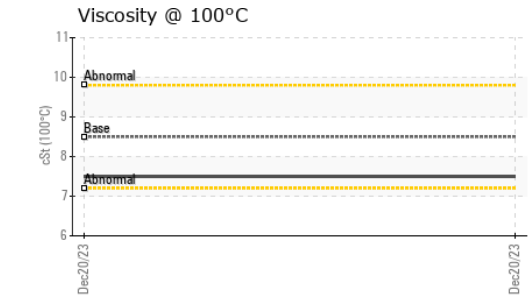
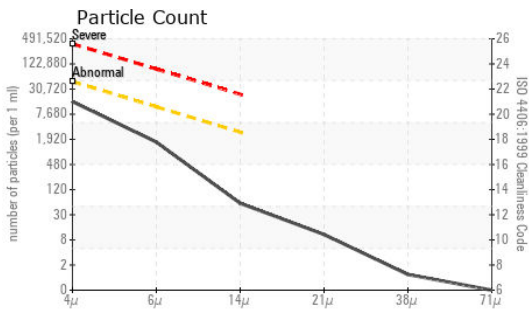
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>50	4	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Water		WC Method	>0.1	NEG	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*		1.9	---	---
Sulfation	Abs/.1mm	ASTM D7415*		23.9	---	---
Particles >4µm		ASTM D7647	>40000	13387	---	---
Particles >6µm		ASTM D7647	>10000	1448	---	---
Particles >14µm		ASTM D7647	>2500	50	---	---
Particles >21µm		ASTM D7647	>640	9	---	---
Particles >38µm		ASTM D7647	>160	1	---	---
Particles >71µm		ASTM D7647	>40	0	---	---
Oil Cleanliness		ISO 4406 (c)	>22/20/18	21/18/13	---	---
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	---	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	---	---
Boron	ppm	ASTM D5185(m)	14	0	---	---
Barium	ppm	ASTM D5185(m)	0.0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0.0	0	---	---
Manganese	ppm	ASTM D5185(m)	0.0	0	---	---
Magnesium	ppm	ASTM D5185(m)	2.6	1	---	---
Calcium	ppm	ASTM D5185(m)	49	93	---	---
Phosphorus	ppm	ASTM D5185(m)	354	396	---	---
Zinc	ppm	ASTM D5185(m)	419	513	---	---
Sulfur	ppm	ASTM D5185(m)	3719	957	---	---
Oxidation	Abs/.1mm	ASTM D7414*		16.8	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	46	42.5	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	8.5	7.5	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	163	143	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : VCP335173 **Received** : 09 Jan 2024
Lab Number : **02607538** **Diagnosed** : 11 Jan 2024
Unique Number : 5708624 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FT-IR, KV100, PrtCount, VI)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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