



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[HILLSBOROUGH CO BOC]
 Machine Id
VOLVO EW160EL 324178
 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		VCP449884	VCP433372	---
Sample Date		Client Info		13 Jun 2024	07 Nov 2023	---
Machine Age	hrs	Client Info		1437	479	---
Oil Age	hrs	Client Info		0	479	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changed	Not Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	5	3	---
Chromium	ppm	ASTM D5185m	>10	<1	0	---
Nickel	ppm	ASTM D5185m	>10	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m		<1	0	---
Aluminum	ppm	ASTM D5185m	>20	3	2	---
Lead	ppm	ASTM D5185m	>20	2	1	---
Copper	ppm	ASTM D5185m	>150	15	8	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

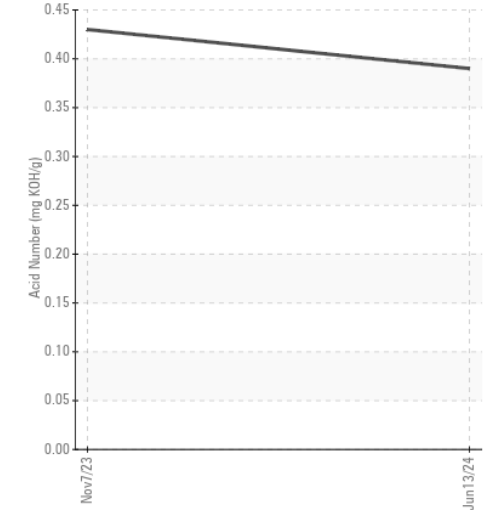
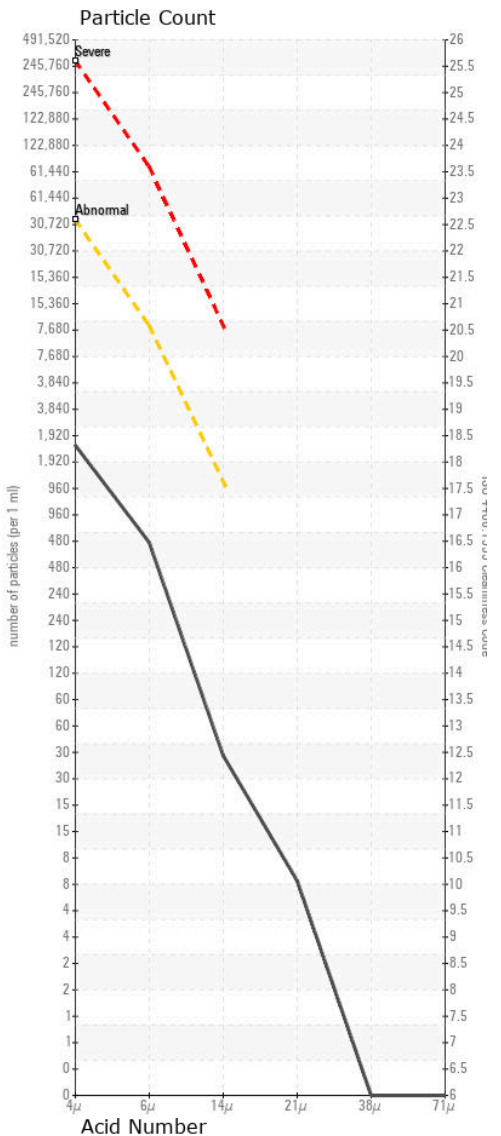
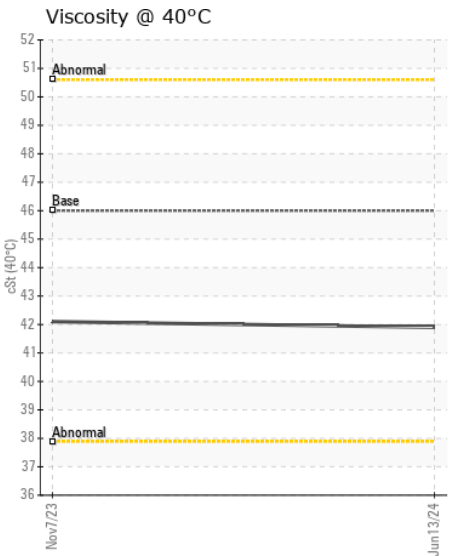
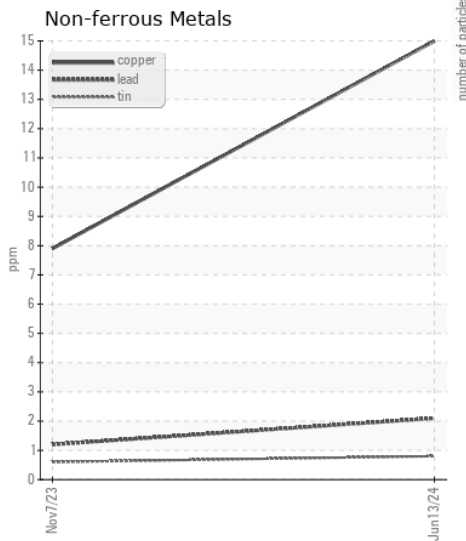
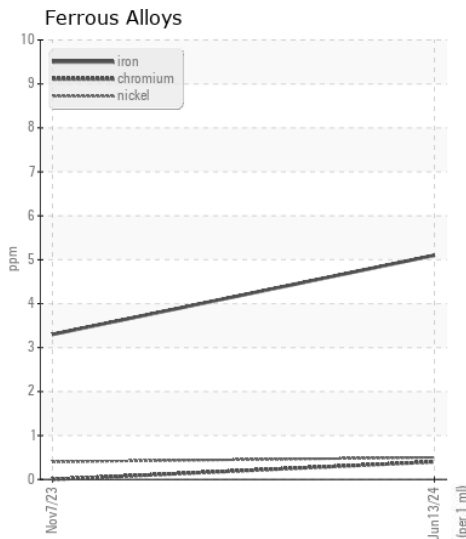
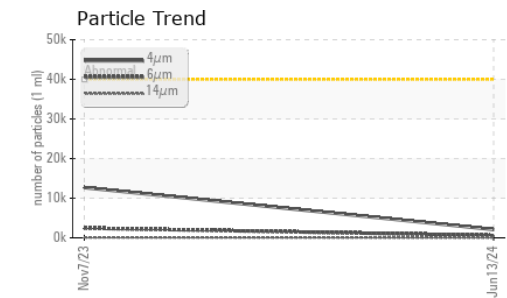
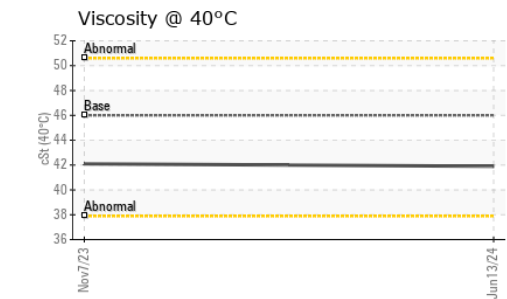
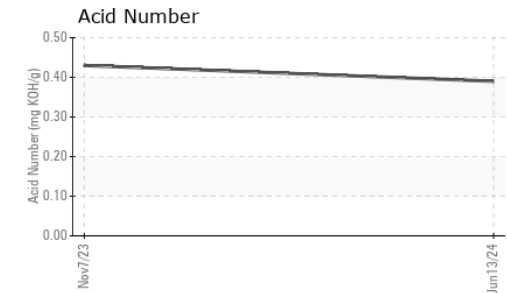
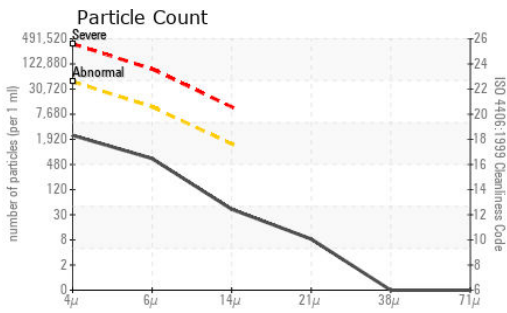
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	5	5	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647	>40000	2092	12681	---
Particles >6µm		ASTM D7647	>10000	585	2450	---
Particles >14µm		ASTM D7647	>1300	36	84	---
Particles >21µm		ASTM D7647	>320	7	23	---
Particles >38µm		ASTM D7647	>80	0	2	---
Particles >71µm		ASTM D7647	>20	0	0	---
Oil Cleanliness		ISO 4406 (c)	>22/20/17	18/16/12	21/18/14	---
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	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		0	0	---
Boron	ppm	ASTM D5185m	14	0	0	---
Barium	ppm	ASTM D5185m	0.0	1	0	---
Molybdenum	ppm	ASTM D5185m	0.0	<1	<1	---
Manganese	ppm	ASTM D5185m	0.0	<1	<1	---
Magnesium	ppm	ASTM D5185m	2.6	<1	<1	---
Calcium	ppm	ASTM D5185m	49	67	76	---
Phosphorus	ppm	ASTM D5185m	354	355	282	---
Zinc	ppm	ASTM D5185m	419	379	365	---
Sulfur	ppm	ASTM D5185m	3719	1331	1380	---
Acid Number (AN)	mg KOH/g	ASTM D8045		0.39	0.43	---
Visc @ 40°C	cSt	ASTM D445	46	41.9	42.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP449884
Lab Number : 06216789
Unique Number : 11089653
Test Package : MOB 2

Received : 21 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 2024 - Wes Davis

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC
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 TAMPA, FL
 US 33619
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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)