



# VOLVO

## OIL ANALYSIS REPORT

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



Area

**[TUCKER]**

Machine Id

**VOLVO ECR145EL 314907**

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		<b>VCP443946</b>	VCP444253	VCP424820
Sample Date		Client Info		<b>22 Jun 2024</b>	06 Feb 2024	27 Mar 2023
Machine Age	hrs	Client Info		<b>3676</b>	3067	2045
Oil Age	hrs	Client Info		<b>0</b>	1067	2045
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Changed
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<b>3</b>	2	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	1
Copper	ppm	ASTM D5185m	>150	<b>25</b>	23	50
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
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

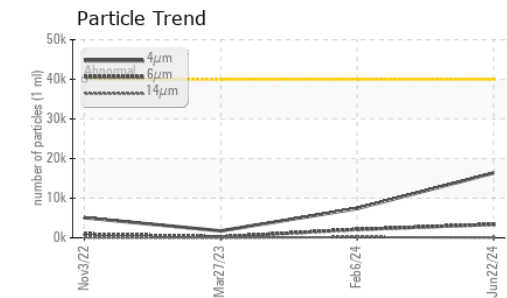
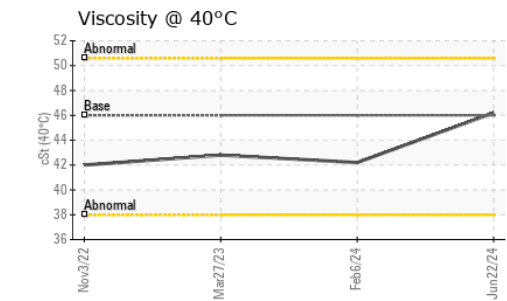
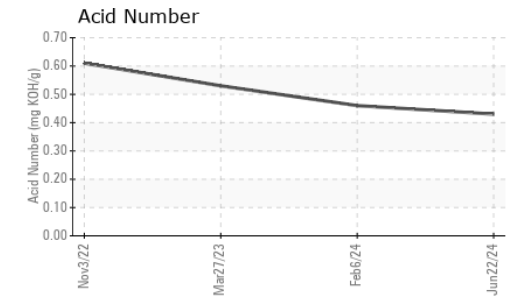
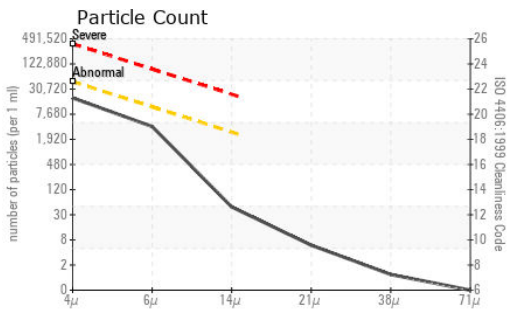
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	<b>3</b>	3	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>40000	<b>16382</b>	7391	1745
Particles >6µm		ASTM D7647	>10000	<b>3397</b>	2111	226
Particles >14µm		ASTM D7647	>2500	<b>41</b>	176	15
Particles >21µm		ASTM D7647	>640	<b>5</b>	49	4
Particles >38µm		ASTM D7647	>160	<b>1</b>	2	1
Particles >71µm		ASTM D7647	>40	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>21/19/13</b>	20/18/15	18/15/11
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>2</b>	2	2
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>&lt;1</b>	0	<1
Calcium	ppm	ASTM D5185m	49	<b>72</b>	52	70
Phosphorus	ppm	ASTM D5185m	354	<b>312</b>	346	436
Zinc	ppm	ASTM D5185m	419	<b>364</b>	408	524
Sulfur	ppm	ASTM D5185m	3719	<b>1492</b>	1515	1308
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.43</b>	0.46	0.53
Visc @ 40°C	cSt	ASTM D445	46	<b>46.2</b>	42.2	42.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP443946  
**Lab Number** : 06230094  
**Unique Number** : 11113587  
**Test Package** : MOB 2

**Received** : 08 Jul 2024  
**Tested** : 09 Jul 2024  
**Diagnosed** : 09 Jul 2024 - Wes Davis

ALTA EQUIPMENT/FLAGLER CONSTRUCTION EQUIPMENT LLC  
 8418 PALM RIVER ROAD  
 TAMPA, FL  
 US 33619

Contact: KENNY HANEY  
 khaney@flaglerce.com

T: (813)630-0077  
 F: (813)630-2233

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)

