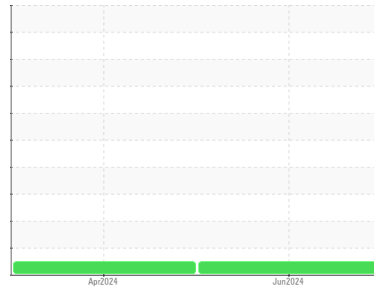




Machine Id  
**VOLVO L60H 623461**  
 Component  
**Tank Hydraulic System**  
 Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (23 GAL)**

Sample Rating Trend



**NORMAL**

**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

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

**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>ASC0004456</b>	ASC0004300	---
Sample Date	Client Info	<b>14 Jun 2024</b>	17 Apr 2024	---
Machine Age	hrs	Client Info	<b>1941</b>	1510
Oil Age	hrs	Client Info	<b>0</b>	1510
Oil Changed	Client Info	<b>Changed</b>	Not Changd	---
Sample Status		<b>NORMAL</b>	NORMAL	---

**CONTAMINATION** method limit/base current history1 history2

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

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

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185m	14	<b>&lt;1</b>	0	---
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	2	---
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	2.6	<b>5</b>	6	---
Calcium	ppm	ASTM D5185m	49	<b>62</b>	93	---
Phosphorus	ppm	ASTM D5185m	354	<b>327</b>	334	---
Zinc	ppm	ASTM D5185m	419	<b>451</b>	428	---
Sulfur	ppm	ASTM D5185m	3719	<b>2096</b>	2235	---

**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	6	---
Sodium	ppm	ASTM D5185m		<b>0</b>	0	---
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	2	---

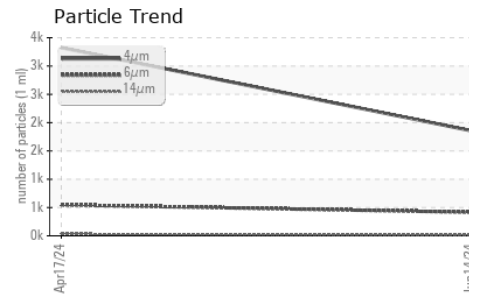
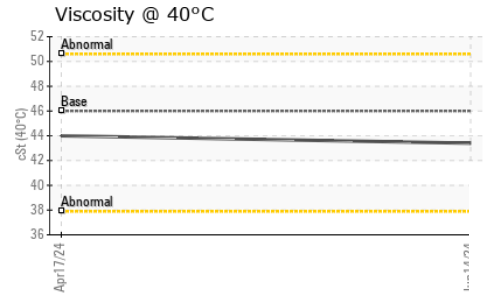
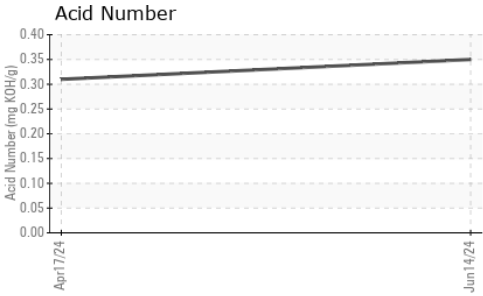
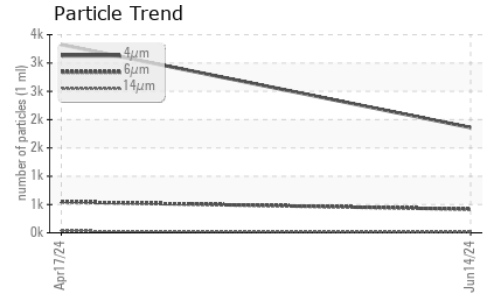
**FLUID CLEANLINESS** method limit/base current history1 history2

Particles >4µm	ASTM D7647		<b>1859</b>	3325	---
Particles >6µm	ASTM D7647	>2500	<b>416</b>	547	---
Particles >14µm	ASTM D7647	>80	<b>17</b>	32	---
Particles >21µm	ASTM D7647	>20	<b>4</b>	6	---
Particles >38µm	ASTM D7647	>4	<b>0</b>	0	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>--/18/13	<b>18/16/11</b>	19/16/12	---

**FLUID DEGRADATION** method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.35</b>	0.31	---
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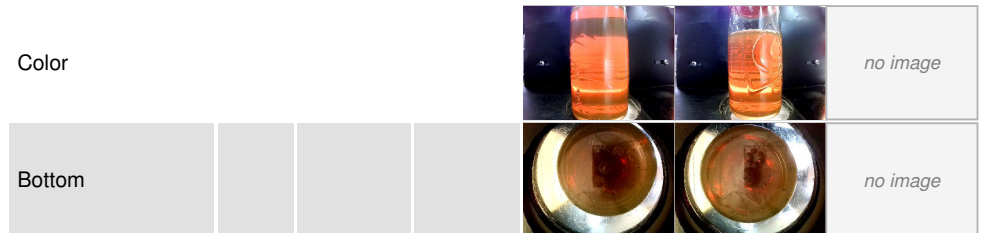
# OIL ANALYSIS REPORT



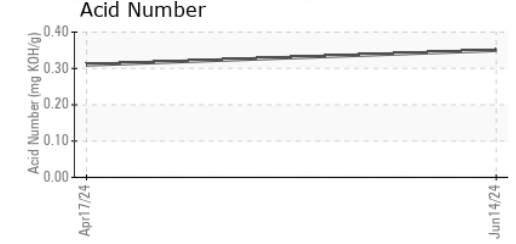
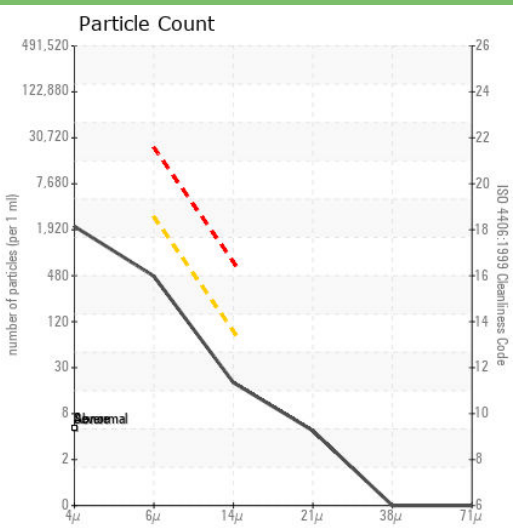
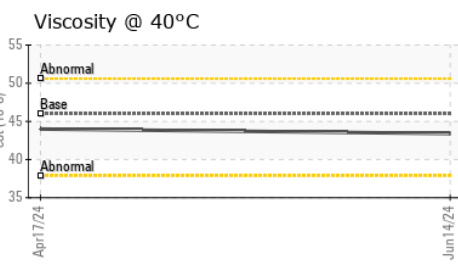
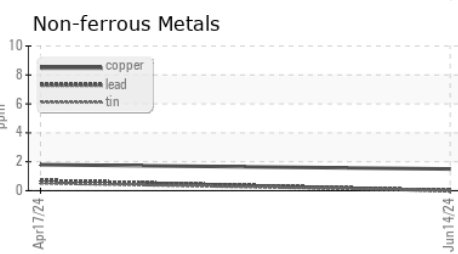
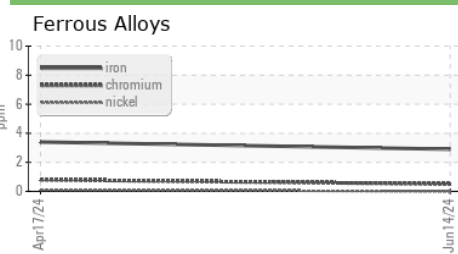
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	<b>43.4</b>	44.0	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0004456      **Received** : 19 Jun 2024  
**Lab Number** : **06214608**      **Tested** : 20 Jun 2024  
**Unique Number** : 11087472      **Diagnosed** : 20 Jun 2024 - Wes Davis  
**Test Package** : CONST

**520 - ASCENDUM MACHINERY INC - KNOXVILLE**  
 5730 RUTLEDGE PIKE  
 KNOXVILLE, TN  
 US 37924  
 Contact: BRANDON GRANT  
 brandon.grant@ascendummachinery.com

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)