



# VOLVO

## OIL ANALYSIS REPORT

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



Area  
**[701266 RITCHIE AUCT]**

Machine Id  
**VOLVO L120H 632683**

Component  
**Hydraulic System**

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

### RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>VCP446499</b>	VCP437426	VCP432737
Sample Date		Client Info		<b>09 Apr 2024</b>	16 Jan 2024	31 Aug 2023
Machine Age	hrs	Client Info		<b>5736</b>	5187	4522
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 Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>3</b>	4	2
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	<1
Copper	ppm	ASTM D5185m	>150	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

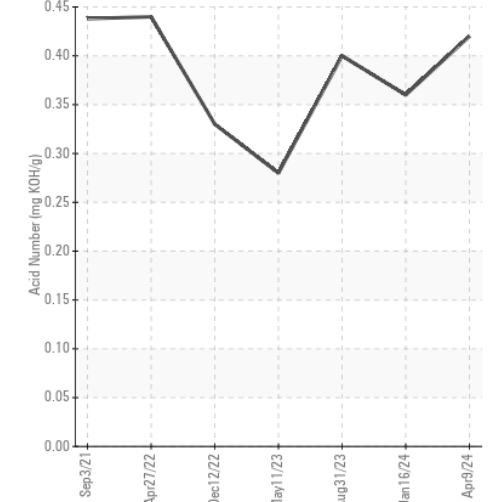
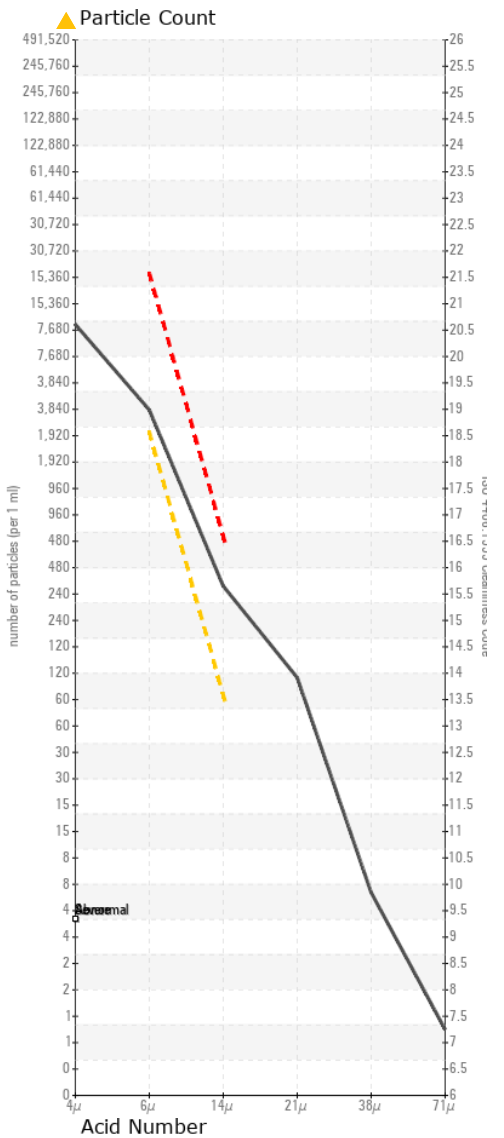
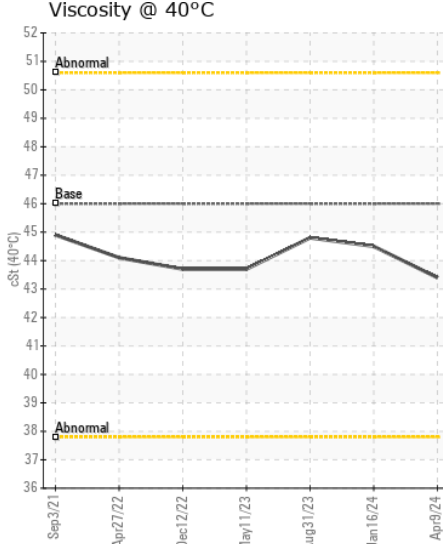
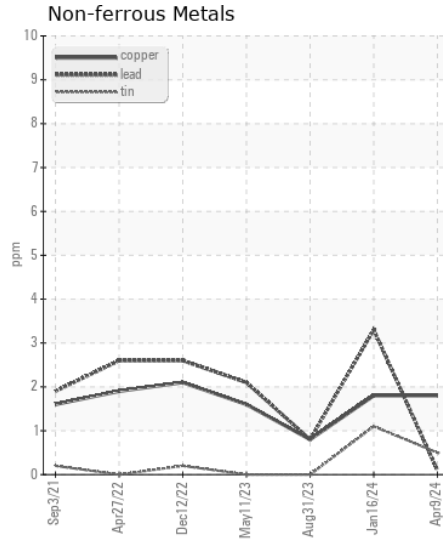
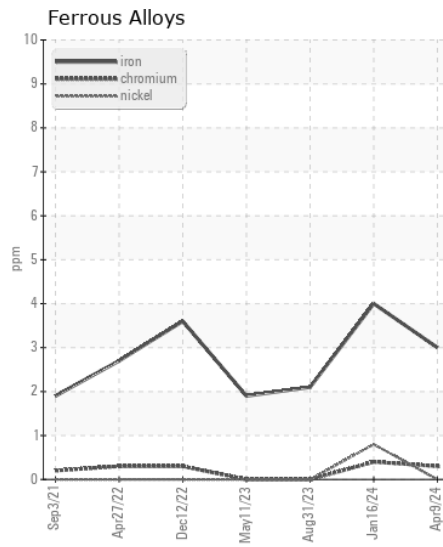
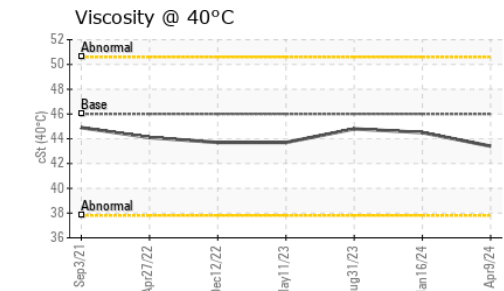
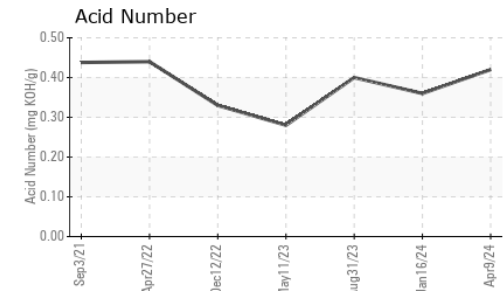
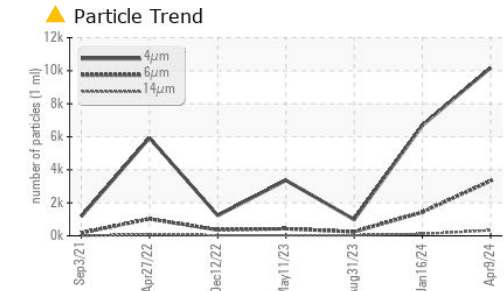
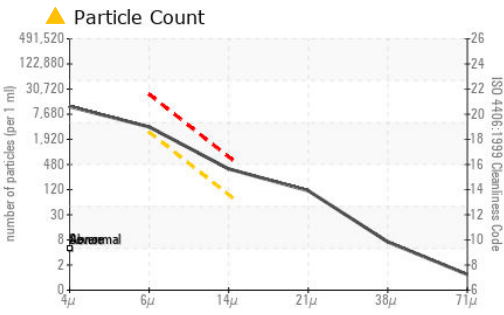
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	2	1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>10173</b>	6699	981
Particles >6µm		ASTM D7647	>2500	<b>3326</b>	1434	241
Particles >14µm		ASTM D7647	>80	<b>331</b>	113	27
Particles >21µm		ASTM D7647	>20	<b>100</b>	41	10
Particles >38µm		ASTM D7647	>4	<b>6</b>	2	1
Particles >71µm		ASTM D7647	>3	<b>1</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	<b>21/19/16</b>	20/18/14	17/15/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	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 oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185m		<b>2</b>	0	<1
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	<1	6
Molybdenum	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	2	0
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	2.6	<b>2</b>	3	6
Calcium	ppm	ASTM D5185m	49	<b>57</b>	73	74
Phosphorus	ppm	ASTM D5185m	354	<b>306</b>	333	336
Zinc	ppm	ASTM D5185m	419	<b>358</b>	463	415
Sulfur	ppm	ASTM D5185m	3719	<b>2016</b>	2463	2734
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.42</b>	0.36	0.40
Visc @ 40°C	cSt	ASTM D445	46	<b>43.4</b>	44.5	44.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : VCP446499  
**Lab Number** : 06150245  
**Unique Number** : 10980323  
**Test Package** : MOB 2

**Received** : 16 Apr 2024  
**Tested** : 17 Apr 2024  
**Diagnosed** : 17 Apr 2024 - Wes Davis

**ALTA EQUIPMENT/FLAGLER EQUIPMENT LLC**  
 9601 BOGGY CREEK RD  
 ORLANDO, FL  
 US 32824

Contact: Robert LaPlante  
 robert.laplante@altg.com

T: (407)508-9736  
 F: (407)659-8720

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)