



# ASCENDUM

## OIL ANALYSIS REPORT



Area

**Ascendum Machinery**

Machine Id

**VOLVO L70H 623725**

Component

**Hydraulic System**

Fluid

**VOLVO SUPER HYDRAULIC OIL 46 (24 GAL)**

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

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0007004</b>	ASC0001390	VCP0000566
Sample Date		Client Info		<b>16 Apr 2024</b>	02 Oct 2023	13 Jun 2022
Machine Age	hrs	Client Info		<b>6990</b>	5924	3437
Oil Age	hrs	Client Info		<b>4503</b>	2487	3437
Filter Age	hrs	Client Info		<b>0</b>	0	3437
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>	ATTENTION	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>4</b>	6	7
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	1	2
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	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	1
Copper	ppm	ASTM D5185m	>150	<b>&lt;1</b>	1	2
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	<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

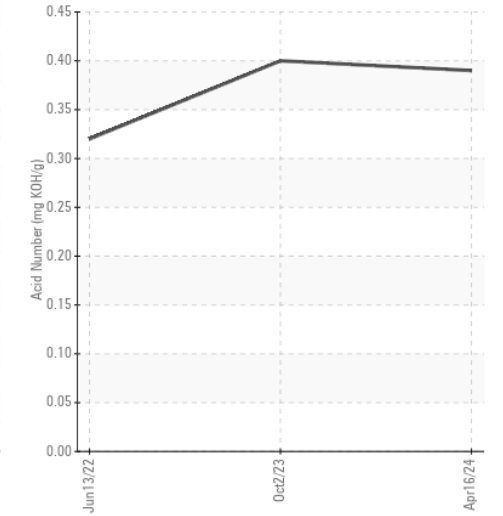
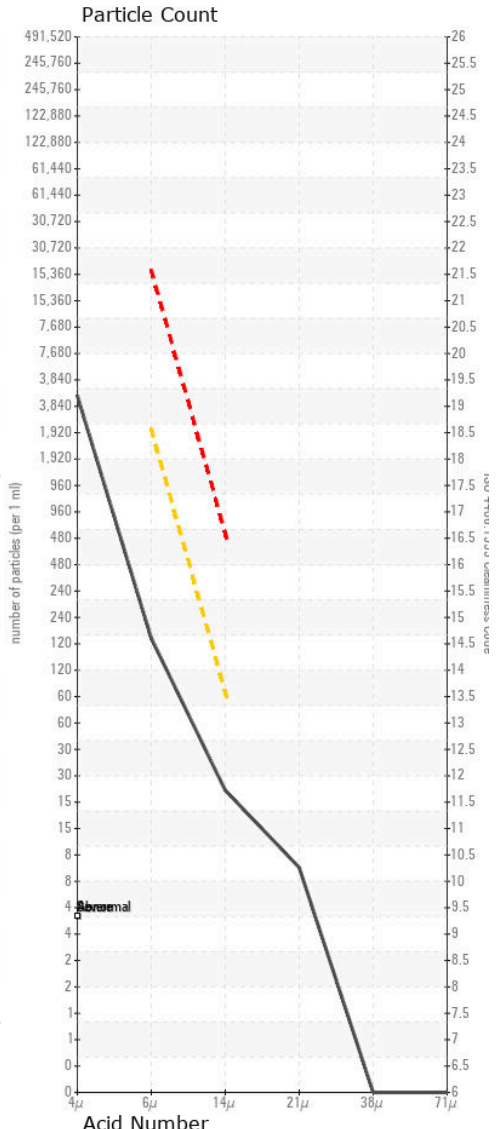
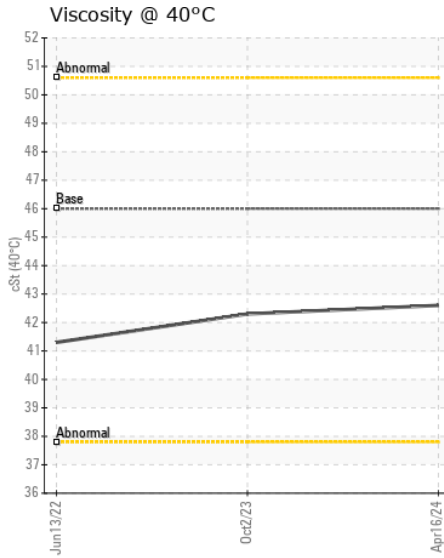
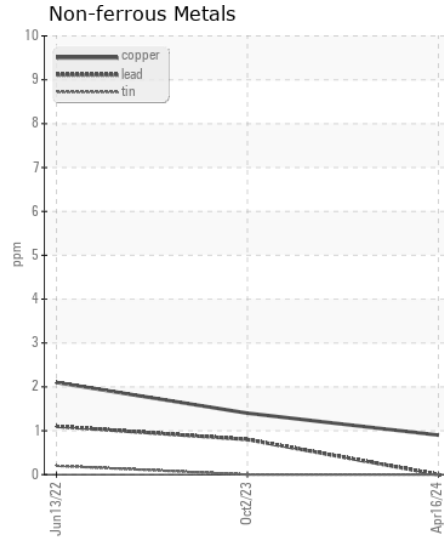
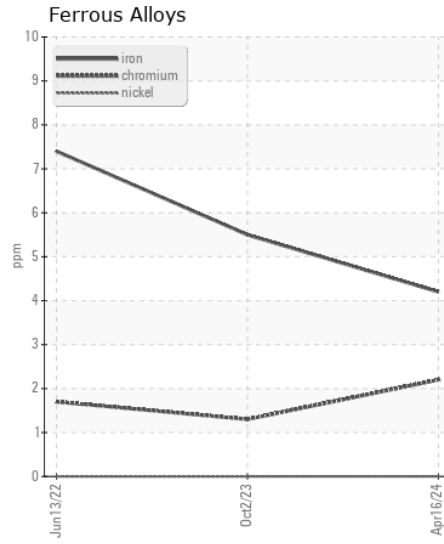
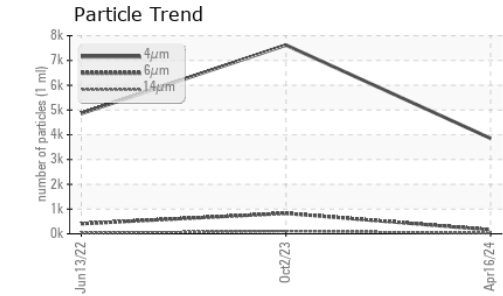
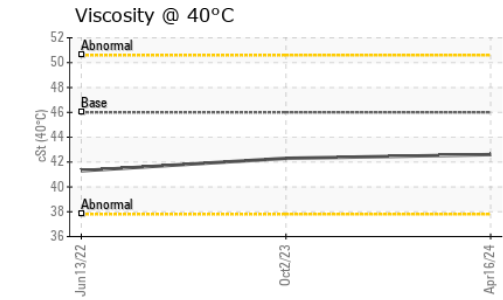
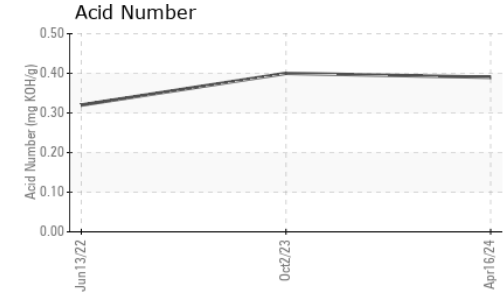
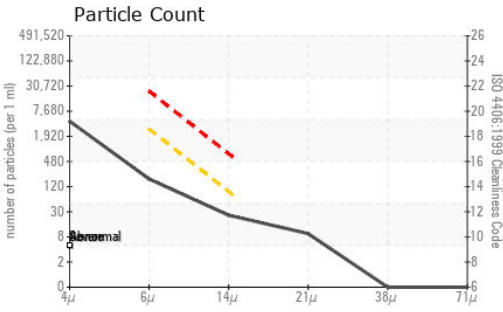
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>3854</b>	7623	4858
Particles >6µm		ASTM D7647	>2500	<b>161</b>	828	408
Particles >14µm		ASTM D7647	>80	<b>22</b>	110	31
Particles >21µm		ASTM D7647	>20	<b>8</b>	40	9
Particles >38µm		ASTM D7647	>4	<b>0</b>	1	1
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	<b>19/15/12</b>	20/17/14	19/16/12
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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>4</b>	<1	3
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>24</b>	31	2
Calcium	ppm	ASTM D5185m	49	<b>65</b>	69	67
Phosphorus	ppm	ASTM D5185m	354	<b>278</b>	299	353
Zinc	ppm	ASTM D5185m	419	<b>334</b>	391	437
Sulfur	ppm	ASTM D5185m	3719	<b>1545</b>	1687	2284
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.39</b>	0.40	0.32
Visc @ 40°C	cSt	ASTM D445	46	<b>42.6</b>	42.3	41.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0007004 **Received** : 17 Apr 2024  
**Lab Number** : 06151909 **Tested** : 18 Apr 2024  
**Unique Number** : 10981987 **Diagnosed** : 18 Apr 2024 - Wes Davis  
**Test Package** : CONST

**EGGER TIMBERPAK**  
 1801 COTTONWOOD ST  
 CHARLOTTE, NC  
 US 28206  
 Contact: Service Manager

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)