



# ASCENDUM

## OIL ANALYSIS REPORT

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



Area  
**Ascendum Machinery**  
Machine Id  
**VOLVO L90H 626713**  
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>ASC0000893</b>	ASC0000762	ASC0000132
Sample Date		Client Info		<b>04 Jan 2024</b>	22 Sep 2023	08 Jun 2023
Machine Age	hrs	Client Info		<b>1499</b>	989	489
Oil Age	hrs	Client Info		<b>1499</b>	989	489
Filter Age	hrs	Client Info		<b>0</b>	989	489
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>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>4</b>	4	1
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
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>	<1	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>150	<b>1</b>	2	<1
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	0
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

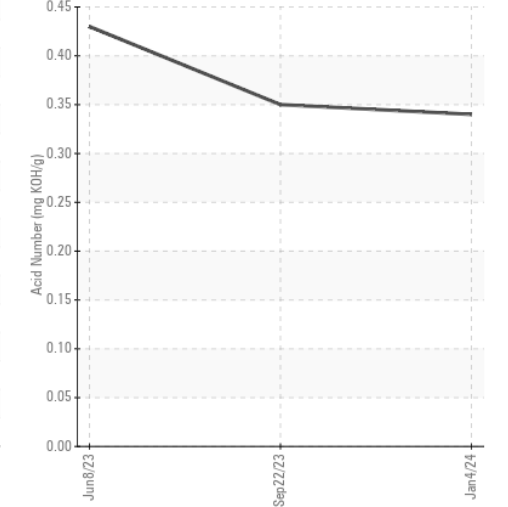
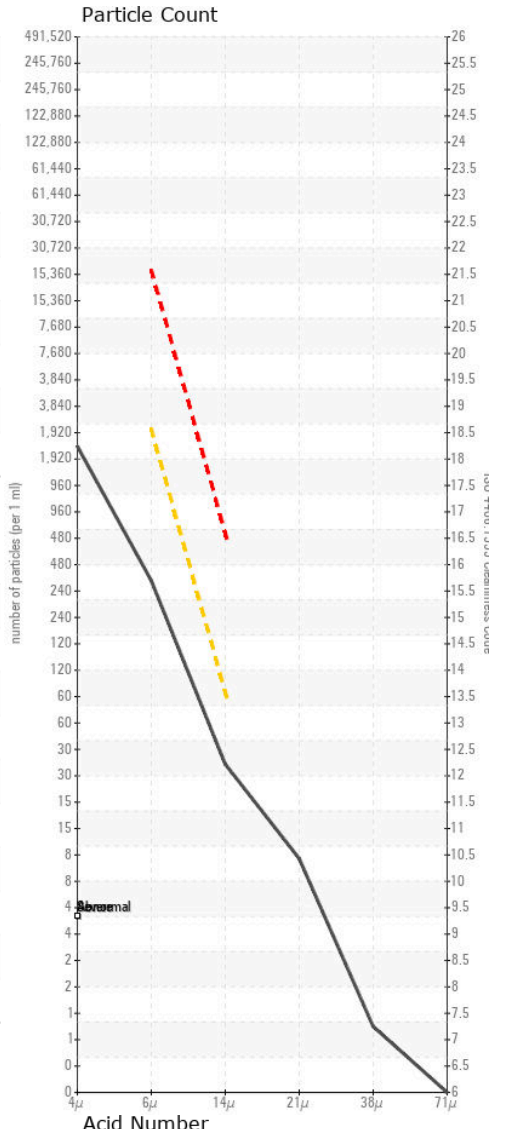
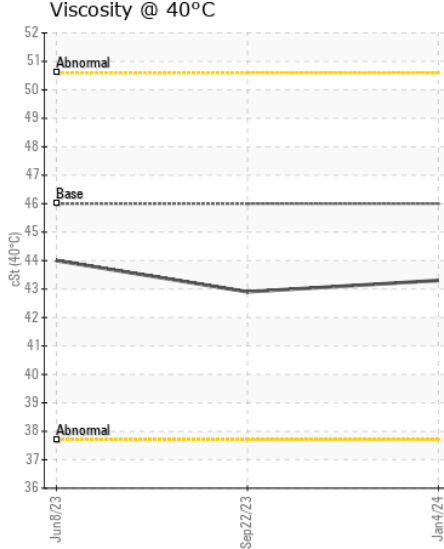
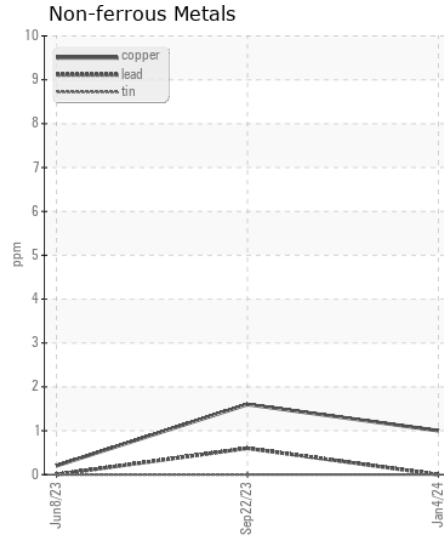
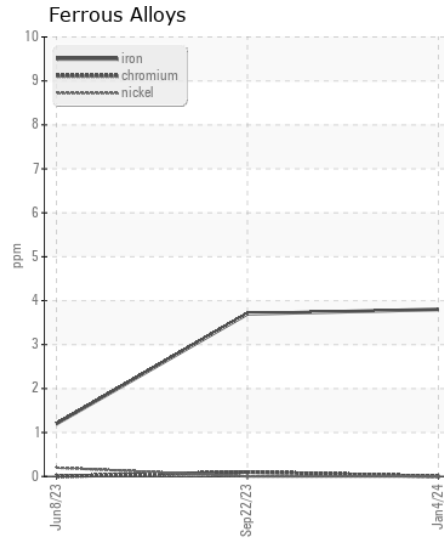
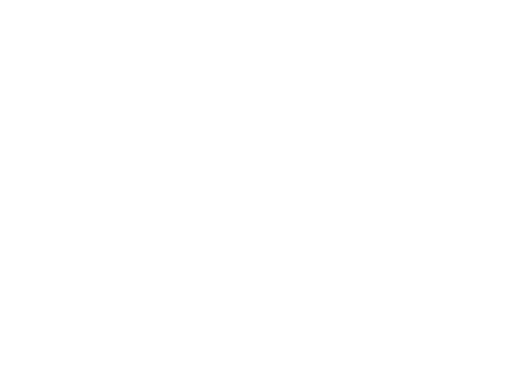
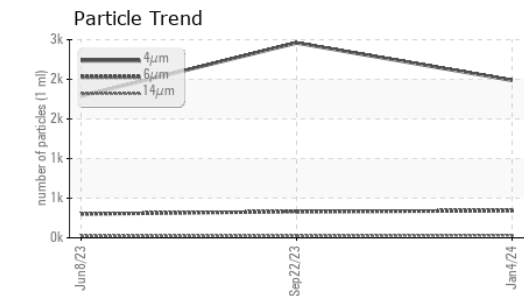
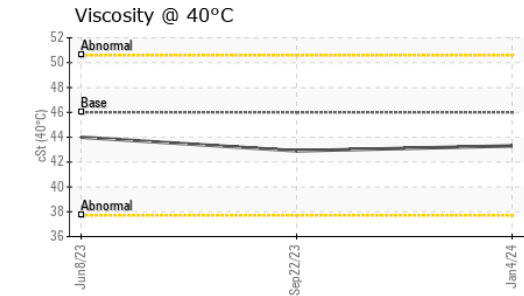
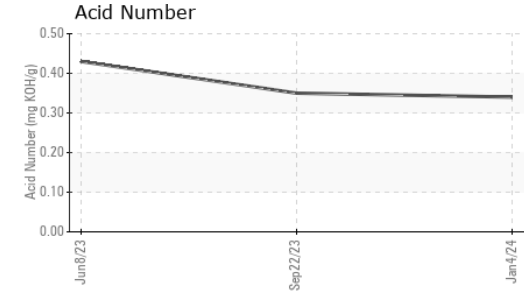
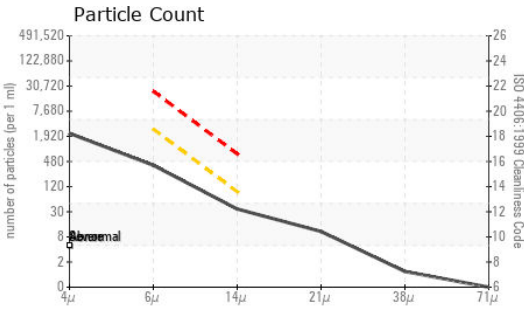
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>1987</b>	2459	1789
Particles >6µm		ASTM D7647	>2500	<b>342</b>	331	300
Particles >14µm		ASTM D7647	>80	<b>31</b>	25	23
Particles >21µm		ASTM D7647	>20	<b>9</b>	7	8
Particles >38µm		ASTM D7647	>4	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	<b>18/16/12</b>	18/16/12	18/15/12
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>&lt;1</b>	1	1
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>	<1	0
Magnesium	ppm	ASTM D5185m	2.6	<b>&lt;1</b>	0	2
Calcium	ppm	ASTM D5185m	49	<b>63</b>	63	71
Phosphorus	ppm	ASTM D5185m	354	<b>338</b>	351	374
Zinc	ppm	ASTM D5185m	419	<b>442</b>	429	485
Sulfur	ppm	ASTM D5185m	3719	<b>2155</b>	2127	2726
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.34</b>	0.35	0.43
Visc @ 40°C	cSt	ASTM D445	46	<b>43.3</b>	42.9	44.0



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0000893 **Received** : 12 Jan 2024  
**Lab Number** : 06059238 **Diagnosed** : 15 Jan 2024  
**Unique Number** : 10830620 **Diagnostician** : Wes Davis  
**Test Package** : MOBCE

**IAA - INSURANCE AUTO AUCTIONS - OAK BROOK**  
 701 HARGER RD, SUITE 201  
 OAK BROOK, IL  
 US 60523  
 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)

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