



# ASCENDUM

## OIL ANALYSIS REPORT

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



Area  
**Ascendum Machinery**  
Machine Id  
**VOLVO L90H 624585**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0001638</b>	VCP0002911	VCP305875
Sample Date		Client Info		<b>10 Jan 2024</b>	05 Jul 2022	03 Mar 2021
Machine Age	hrs	Client Info		<b>7512</b>	6031	4027
Oil Age	hrs	Client Info		<b>4545</b>	2004	0
Filter Age	hrs	Client Info		<b>0</b>	2004	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>1</b>	4	5
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<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>0</b>	2	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	1	2
Copper	ppm	ASTM D5185m	>20	<b>0</b>	1	2
Tin	ppm	ASTM D5185m	>20	<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

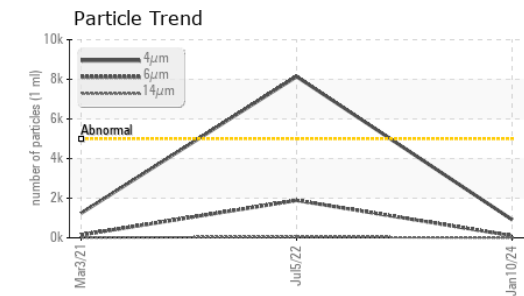
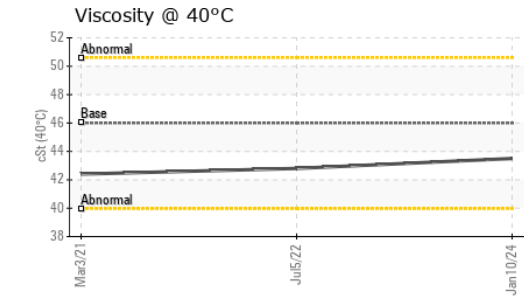
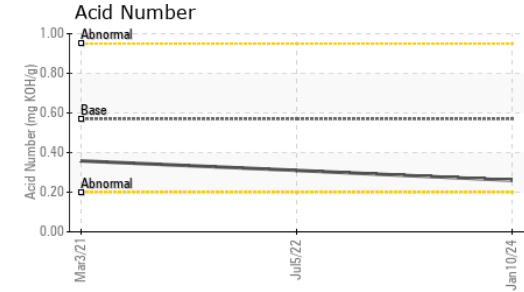
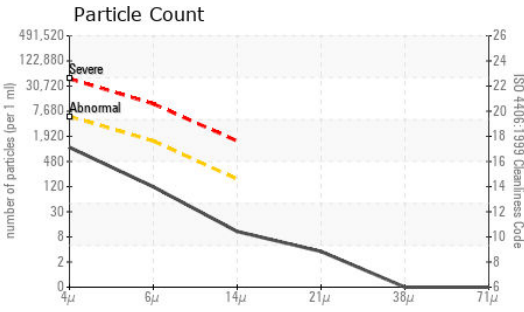
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>2</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>918</b>	8138	1242
Particles >6µm		ASTM D7647	>1300	<b>105</b>	1889	147
Particles >14µm		ASTM D7647	>160	<b>9</b>	45	12
Particles >21µm		ASTM D7647	>40	<b>3</b>	10	3
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>17/14/10</b>	20/18/13	17/14/11
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	>0.2	<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>	0	0
Boron	ppm	ASTM D5185m	5	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m	25	<b>0</b>	7	0
Calcium	ppm	ASTM D5185m	200	<b>55</b>	60	67
Phosphorus	ppm	ASTM D5185m	300	<b>293</b>	327	377
Zinc	ppm	ASTM D5185m	370	<b>376</b>	432	470
Sulfur	ppm	ASTM D5185m	2500	<b>1903</b>	2503	3042
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.26</b>	0.31	0.358
Visc @ 40°C	cSt	ASTM D445	46	<b>43.5</b>	42.8	42.4



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0001638 **Received** : 12 Jan 2024  
**Lab Number** : 06059241 **Diagnosed** : 15 Jan 2024  
**Unique Number** : 10830623 **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)