



# ASCENDUM

## OIL ANALYSIS REPORT



Area  
**Ascendum Machinery**  
 Machine Id  
**VOLVO L90G 617635**  
 Component  
**Hydraulic System**  
 Fluid  
**AW HYDRAULIC OIL ISO 46 (--- 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>ASC0001973</b>	VCP0000788	VCP294626
Sample Date		Client Info		<b>03 Jan 2024</b>	12 Apr 2022	15 Mar 2021
Machine Age	hrs	Client Info		<b>12500</b>	9791	8003
Oil Age	hrs	Client Info		<b>9083</b>	9791	0
Filter Age	hrs	Client Info		<b>0</b>	9791	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>	ABNORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>1</b>	3	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	1	0
Lead	ppm	ASTM D5185m	>20	<b>0</b>	1	2
Copper	ppm	ASTM D5185m	>150	<b>1</b>	2	4
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

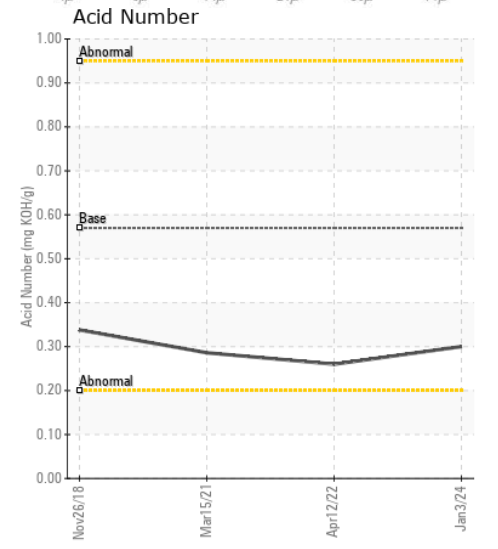
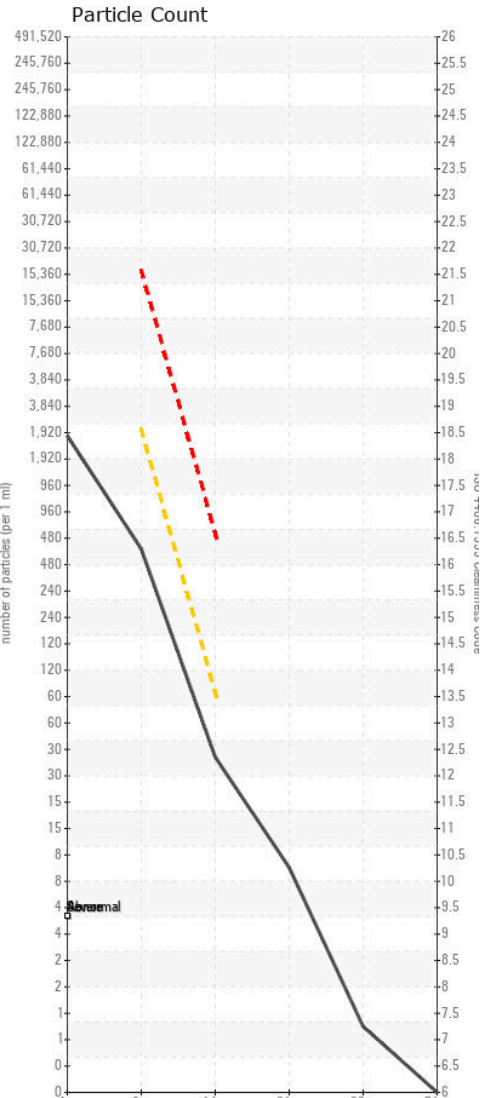
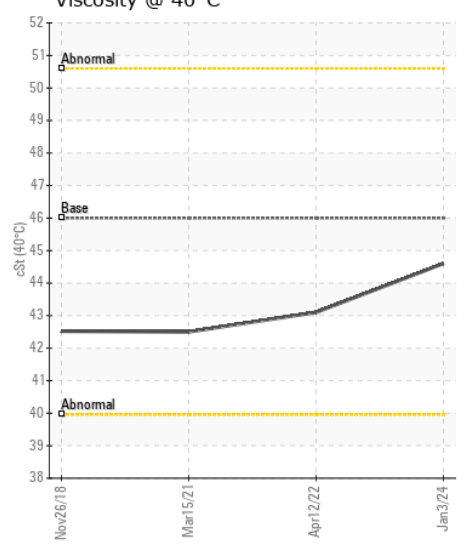
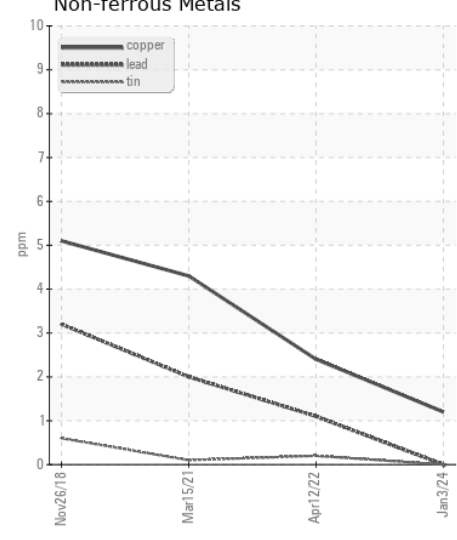
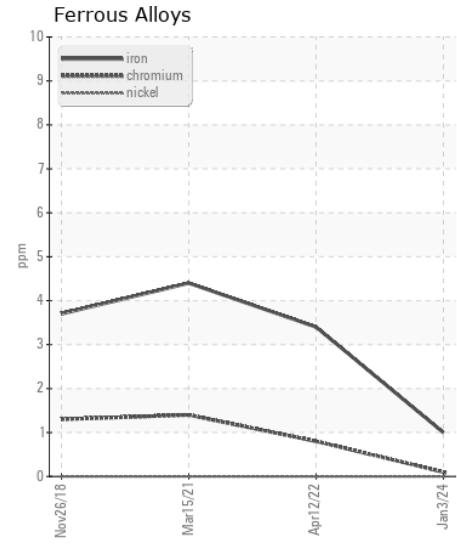
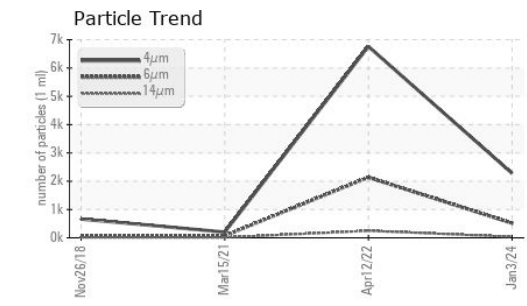
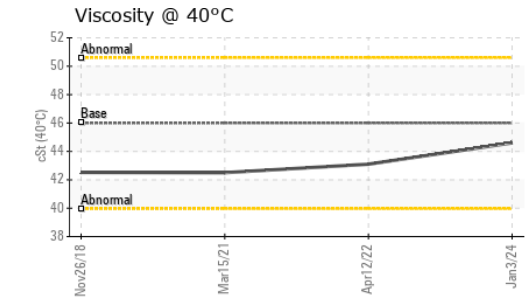
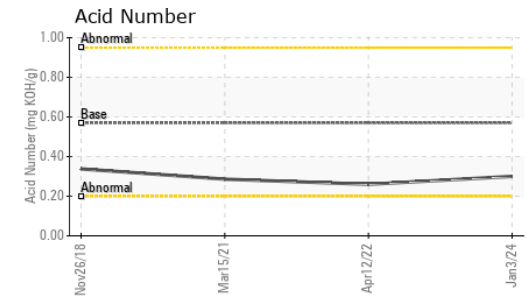
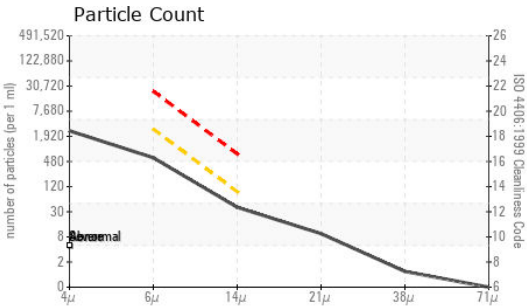
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	<b>1</b>	3	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	1	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647		<b>2279</b>	6761	202
Particles >6µm		ASTM D7647	>2500	<b>518</b>	2138	70
Particles >14µm		ASTM D7647	>80	<b>34</b>	▲ 248	11
Particles >21µm		ASTM D7647	>20	<b>8</b>	▲ 63	4
Particles >38µm		ASTM D7647	>4	<b>1</b>	4	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	<b>18/16/12</b>	▲ 20/18/15	15/13/11
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 condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>1</b>	0	<1
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	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>	<1	<1
Magnesium	ppm	ASTM D5185m	25	<b>&lt;1</b>	2	1
Calcium	ppm	ASTM D5185m	200	<b>59</b>	65	76
Phosphorus	ppm	ASTM D5185m	300	<b>301</b>	348	349
Zinc	ppm	ASTM D5185m	370	<b>421</b>	463	432
Sulfur	ppm	ASTM D5185m	2500	<b>1867</b>	2133	2618
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.30</b>	0.26	0.286
Visc @ 40°C	cSt	ASTM D445	46	<b>44.6</b>	43.1	42.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0001973 **Received** : 09 Jan 2024  
**Lab Number** : 06055342 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821291 **Diagnostician** : Wes Davis  
**Test Package** : MOBCE

**MANHEIM AUTO AUCTION**  
 6325 PEACHTREE DUNWOODY RD NE  
 ATLANTA, GA  
 US 30328  
 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)