



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR

**ABNORMAL**

CONTAMINATION

**NORMAL**

FLUID CONDITION

**NORMAL**



Area

**Ascendum Machinery**

Machine Id

**VOLVO A30G A30GV742414**

Component

**Hydraulic System**

Fluid

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

### RECOMMENDATION

We recommend you service the filters on this component. We advise that you inspect for the source(s) of metal. Resample at the next service interval to monitor. We were unable to perform a particle count due to metal particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0007287</b>	ASC0000805	---
Sample Date		Client Info		<b>21 Feb 2024</b>	18 Sep 2023	---
Machine Age	hrs	Client Info		<b>5214</b>	4505	---
Oil Age	hrs	Client Info		<b>709</b>	4505	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Not Changed</b>	Changed	---
Filter Changed		Client Info		<b>Not Changed</b>	Changed	---
Sample Status				<b>ABNORMAL</b>	ABNORMAL	---

### WEAR

Moderate concentration of visible metal present. All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>6</b>	6	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	---
Silver	ppm	ASTM D5185m		<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	4	---
Lead	ppm	ASTM D5185m	>20	<b>2</b>	1	---
Copper	ppm	ASTM D5185m	>150	<b>2</b>	2	---
Tin	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>▲ MODER</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

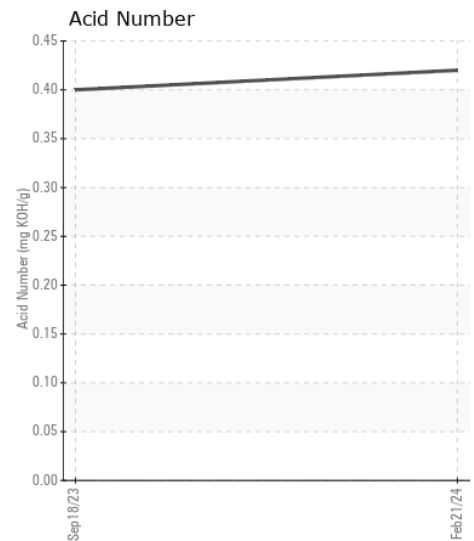
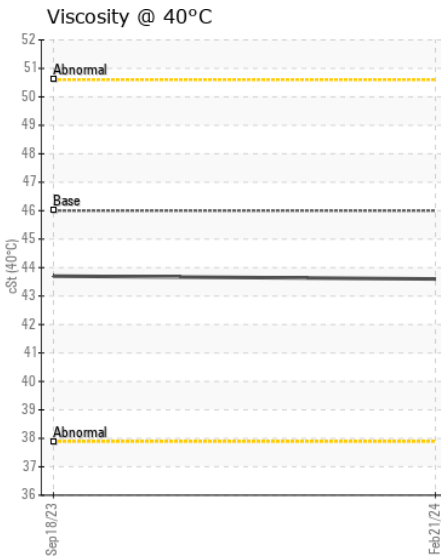
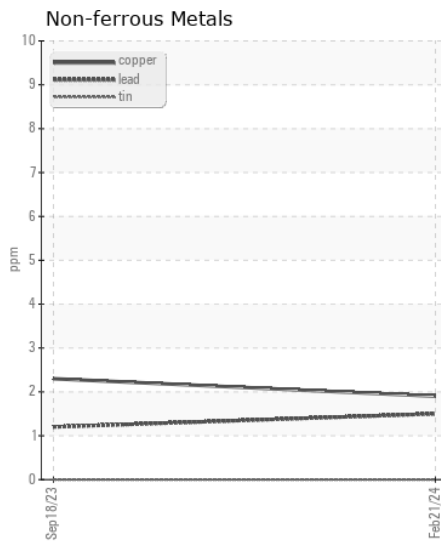
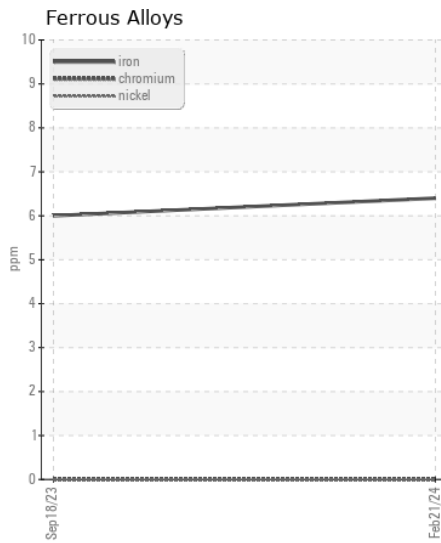
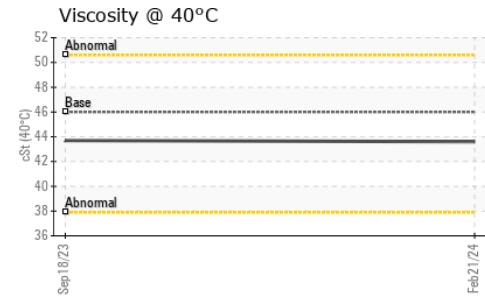
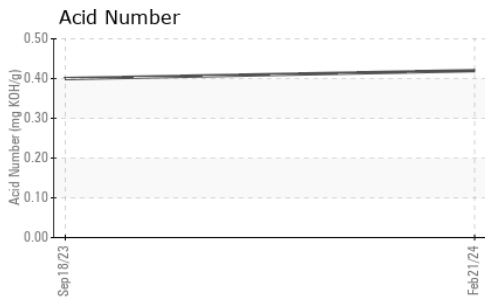
No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>3</b>	2	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	---
Water		WC Method	>0.1	<b>NEG</b>	NEG	---
Particles >4µm		ASTM D7647		<b>---</b>	34655	---
Particles >6µm		ASTM D7647	>5000	<b>---</b>	<b>▲ 10359</b>	---
Particles >14µm		ASTM D7647	>160	<b>---</b>	<b>▲ 833</b>	---
Particles >21µm		ASTM D7647	>40	<b>---</b>	<b>▲ 218</b>	---
Particles >38µm		ASTM D7647	>10	<b>---</b>	11	---
Particles >71µm		ASTM D7647	>3	<b>---</b>	1	---
Oil Cleanliness		ISO 4406 (c)	>-/19/14	<b>---</b>	<b>▲ 22/21/17</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	---

### FLUID CONDITION

The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	3	---
Boron	ppm	ASTM D5185m	14	<b>0</b>	0	---
Barium	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Manganese	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	2.6	<b>2</b>	1	---
Calcium	ppm	ASTM D5185m	49	<b>63</b>	61	---
Phosphorus	ppm	ASTM D5185m	354	<b>368</b>	375	---
Zinc	ppm	ASTM D5185m	419	<b>483</b>	471	---
Sulfur	ppm	ASTM D5185m	3719	<b>2557</b>	3026	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.42</b>	0.40	---
Visc @ 40°C	cSt	ASTM D445	46	<b>43.6</b>	43.7	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : ASC0007287

**Lab Number** : 06099105

**Unique Number** : 10897335

**Test Package** : CONST

**Received** : 23 Feb 2024

**Tested** : 26 Feb 2024

**Diagnosed** : 26 Feb 2024 - Don Baldrige

**CAROLINA PRECISION GRADING**

7427 MATTHEWS MINT HILL ROAD

CHARLOTTE, NC

US 28227

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)

T:

F: