



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area  
**Ascendum Machinery/500 Hour CSA**  
Machine Id  
**VOLVO A45G 2363 (S/N A45GV752172)**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0009413	ASC0010283	---
Sample Date		Client Info		16 Jul 2024	02 Apr 2024	---
Machine Age	hrs	Client Info		1058	476	---
Oil Age	hrs	Client Info		1058	476	---
Filter Age	hrs	Client Info		1058	476	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Changed	Not Changd	---
Sample Status				NORMAL	NORMAL	---

### WEAR

All component wear rates are normal.

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

### CONTAMINATION

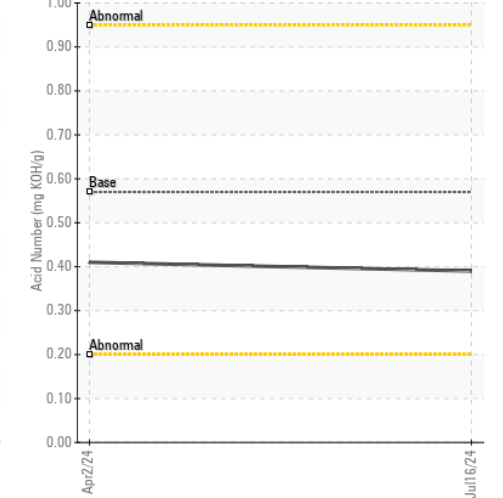
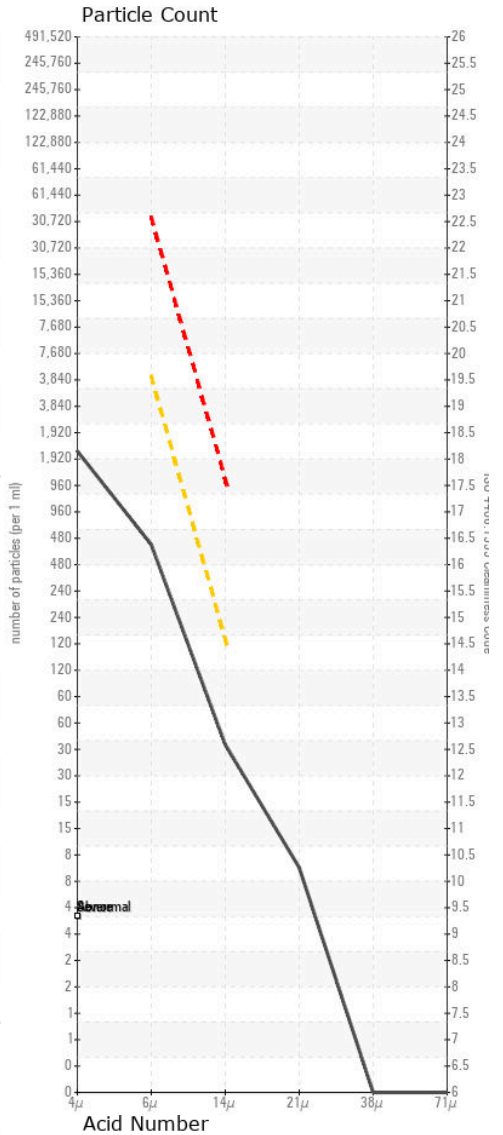
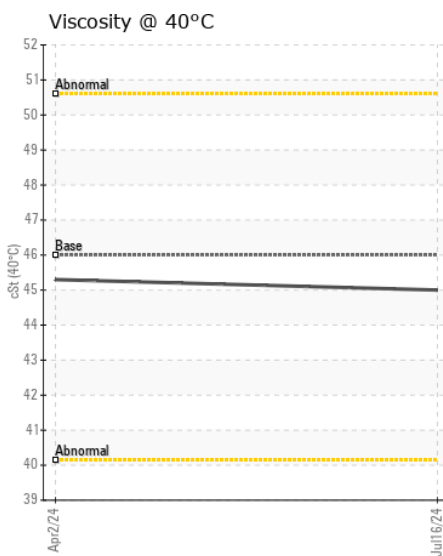
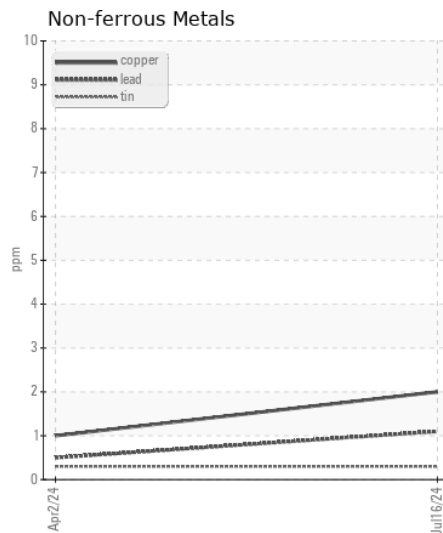
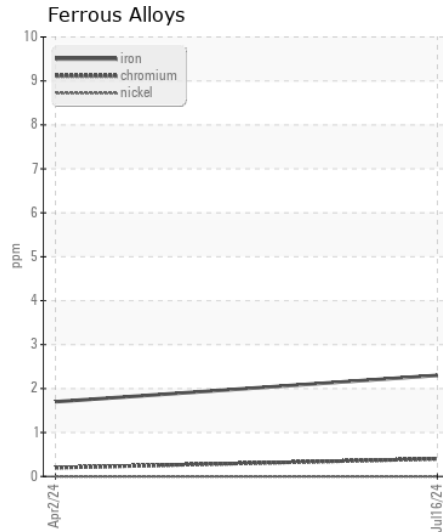
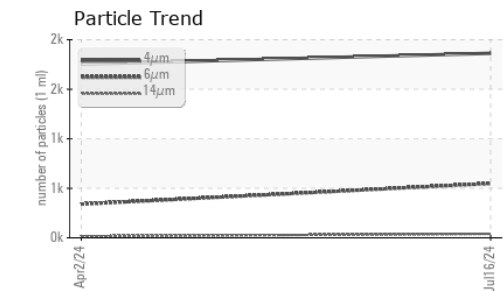
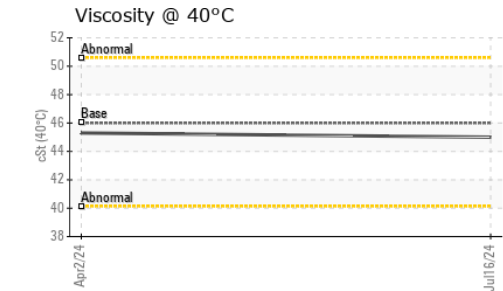
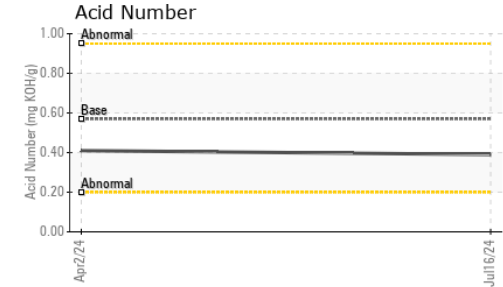
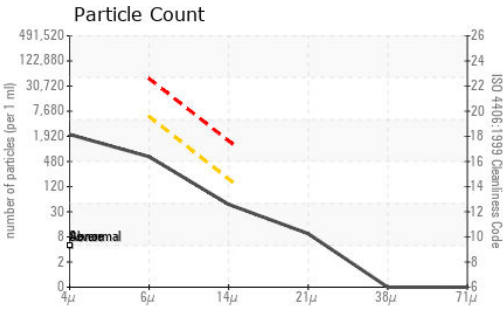
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	2	2	---
Potassium	ppm	ASTM D5185m	>20	1	1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		1863	1753	---
Particles >6µm		ASTM D7647	>5000	548	340	---
Particles >14µm		ASTM D7647	>160	40	16	---
Particles >21µm		ASTM D7647	>40	8	5	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/19/14	18/16/12	18/16/11	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	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		0	0	---
Boron	ppm	ASTM D5185m	5	0	0	---
Barium	ppm	ASTM D5185m	5	0	0	---
Molybdenum	ppm	ASTM D5185m	5	<1	<1	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m	25	<1	1	---
Calcium	ppm	ASTM D5185m	200	108	105	---
Phosphorus	ppm	ASTM D5185m	300	286	275	---
Zinc	ppm	ASTM D5185m	370	410	383	---
Sulfur	ppm	ASTM D5185m	2500	1604	1318	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.39	0.41	---
Visc @ 40°C	cSt	ASTM D445	46	45.0	45.3	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0009413 **Received** : 18 Jul 2024  
**Lab Number** : 06240220 **Tested** : 19 Jul 2024  
**Unique Number** : 11129054 **Diagnosed** : 19 Jul 2024 - Wes Davis  
**Test Package** : CONST

**G S MATERIALS INC**  
 PO BOX 1335  
 BURLINGTON, NC  
 US 27216

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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)