



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id  
**VOLVO A45G 353449**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011499	ASC0006324	---
Sample Date		Client Info		15 May 2024	04 Jan 2024	---
Machine Age	hrs	Client Info		2042	1406	---
Oil Age	hrs	Client Info		2042	1406	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	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	1	2	---
Lead	ppm	ASTM D5185m	>20	2	<1	---
Copper	ppm	ASTM D5185m	>150	2	22	---
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

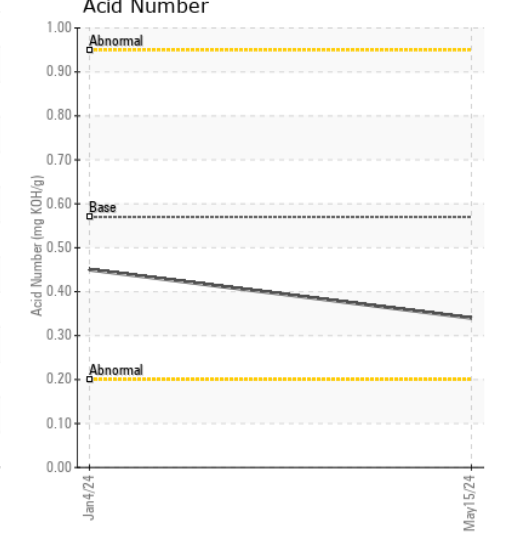
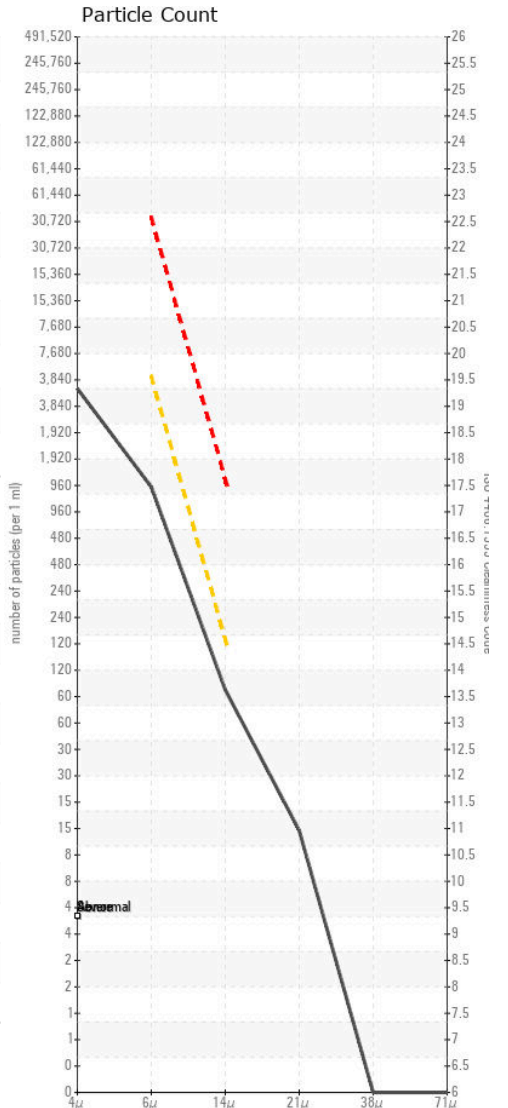
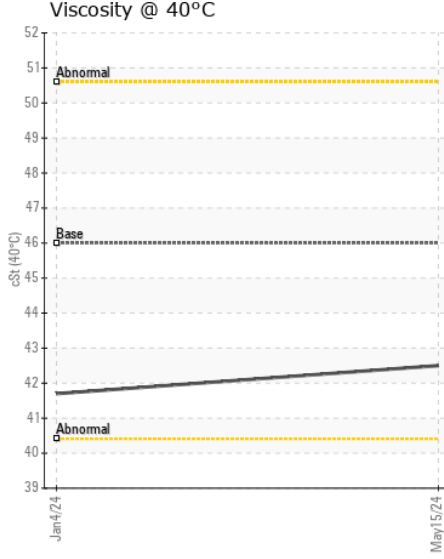
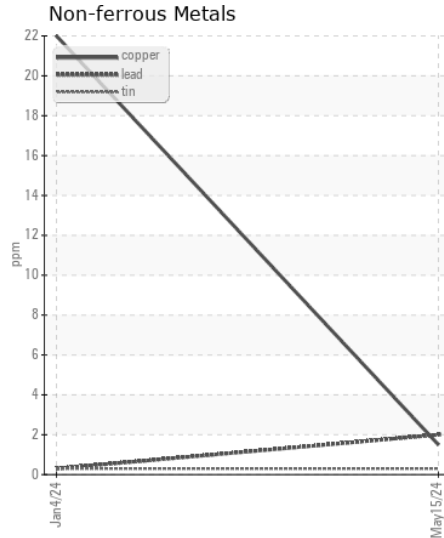
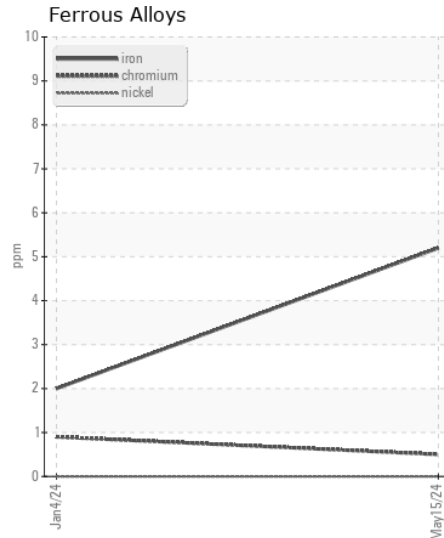
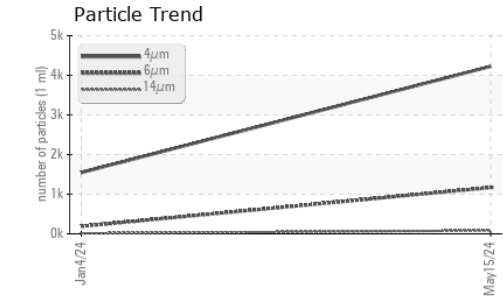
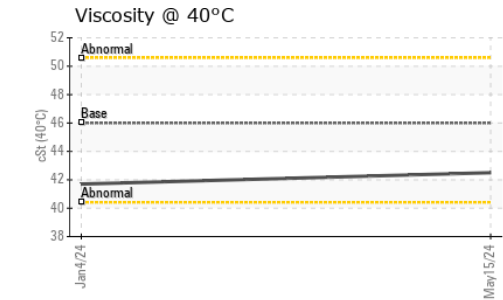
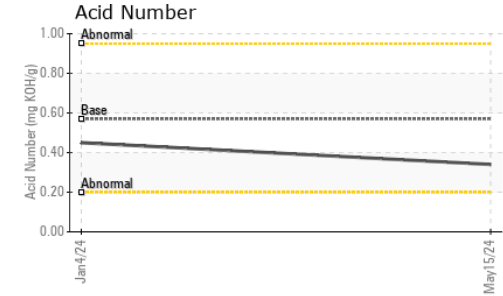
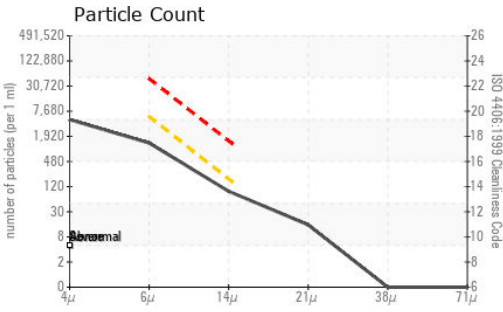
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	6	4	---
Potassium	ppm	ASTM D5185m	>20	2	2	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		4227	1546	---
Particles >6µm		ASTM D7647	>5000	1167	189	---
Particles >14µm		ASTM D7647	>160	82	10	---
Particles >21µm		ASTM D7647	>40	13	3	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/19/14	19/17/14	18/15/10	---
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		1	0	---
Boron	ppm	ASTM D5185m	5	0	0	---
Barium	ppm	ASTM D5185m	5	0	0	---
Molybdenum	ppm	ASTM D5185m	5	0	<1	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m	25	2	<1	---
Calcium	ppm	ASTM D5185m	200	60	64	---
Phosphorus	ppm	ASTM D5185m	300	337	500	---
Zinc	ppm	ASTM D5185m	370	434	567	---
Sulfur	ppm	ASTM D5185m	2500	1486	1246	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.34	0.45	---
Visc @ 40°C	cSt	ASTM D445	46	42.5	41.7	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0011499 **Received** : 29 May 2024  
**Lab Number** : 06193900 **Tested** : 30 May 2024  
**Unique Number** : 11056023 **Diagnosed** : 30 May 2024 - Wes Davis  
**Test Package** : CONST

**117 - ASCENDUM MACHINERY INC - GREENVILLE**  
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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)