



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO A45G 2362 (S/N A45GV752171)
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		ASC0009165	ASC0010298	---
Sample Date		Client Info		16 Jul 2024	01 Apr 2024	---
Machine Age	hrs	Client Info		1072	501	---
Oil Age	hrs	Client Info		1072	501	---
Filter Age	hrs	Client Info		1072	501	---
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	11	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	14	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

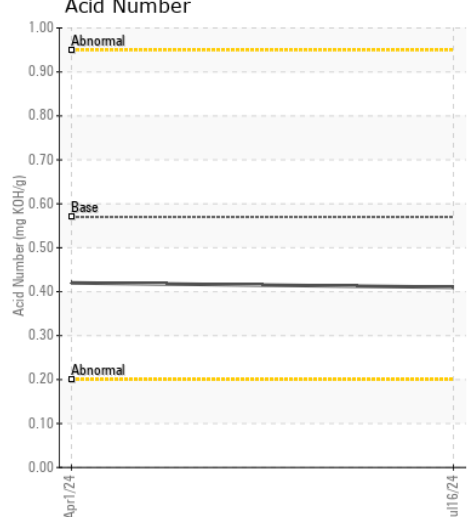
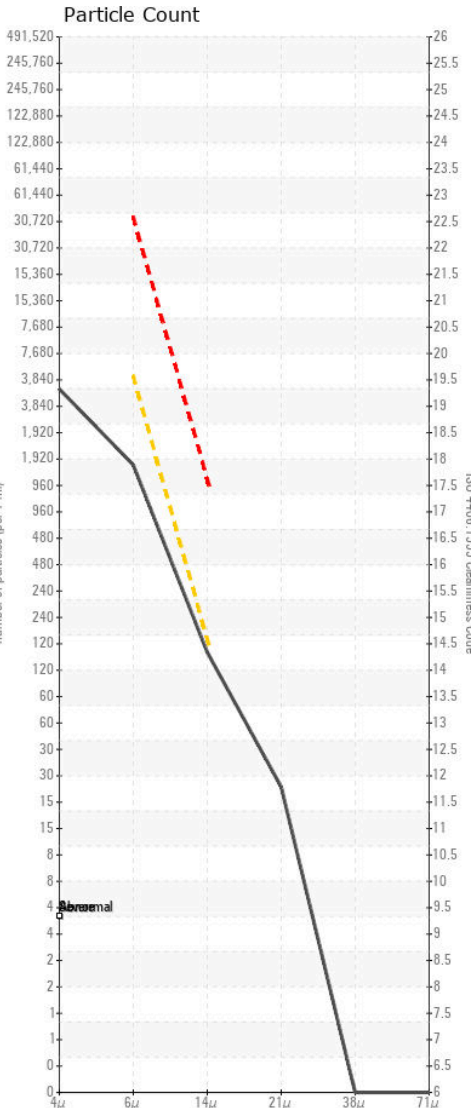
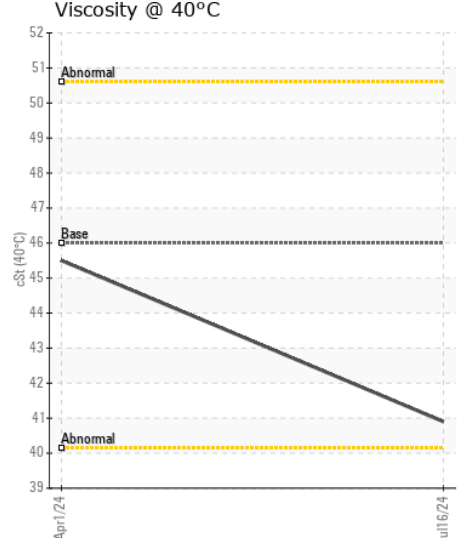
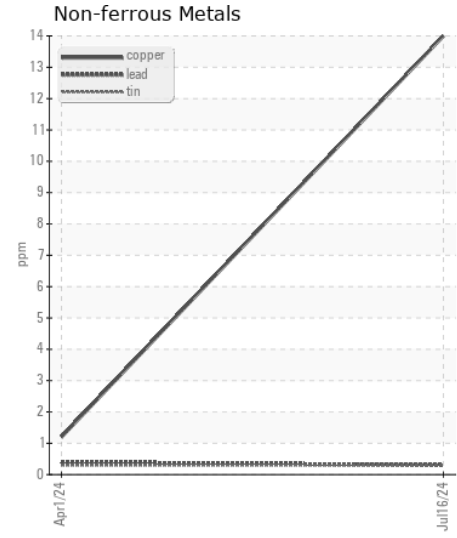
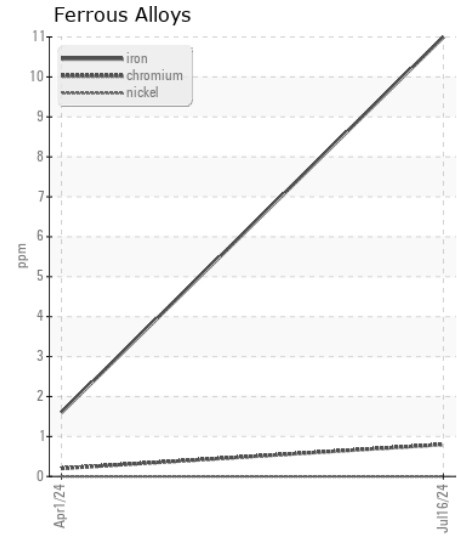
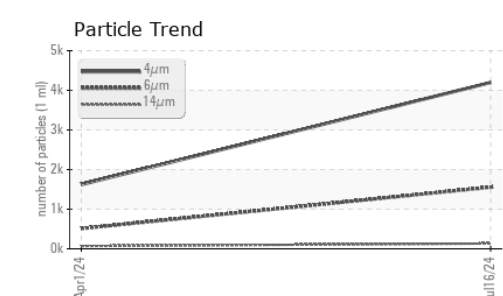
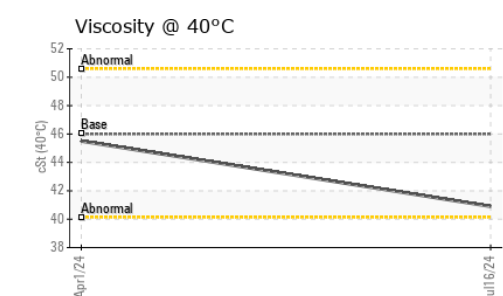
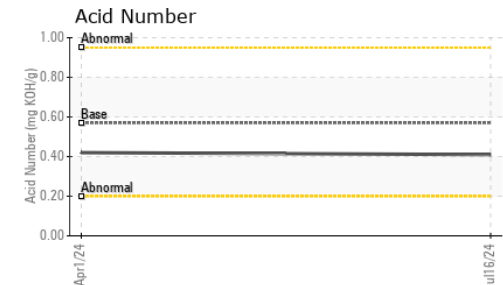
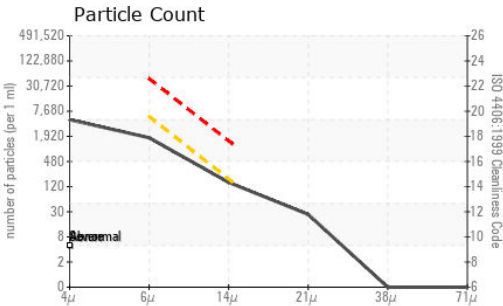
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	6	2	---
Potassium	ppm	ASTM D5185m	>20	2	1	---
Water		WC Method	>0.1	NEG	NEG	---
Particles >4µm		ASTM D7647		4198	1621	---
Particles >6µm		ASTM D7647	>5000	1555	511	---
Particles >14µm		ASTM D7647	>160	134	69	---
Particles >21µm		ASTM D7647	>40	23	13	---
Particles >38µm		ASTM D7647	>10	0	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>-/19/14	19/18/14	18/16/13	---
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	0	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m	25	13	<1	---
Calcium	ppm	ASTM D5185m	200	57	110	---
Phosphorus	ppm	ASTM D5185m	300	318	280	---
Zinc	ppm	ASTM D5185m	370	412	378	---
Sulfur	ppm	ASTM D5185m	2500	1672	1514	---
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.41	0.42	---
Visc @ 40°C	cSt	ASTM D445	46	40.9	45.5	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0009165 **Received** : 18 Jul 2024
Lab Number : 06240221 **Tested** : 19 Jul 2024
Unique Number : 11129055 **Diagnosed** : 19 Jul 2024 - Wes Davis
Test Package : CONST

G S MATERIALS INC
 PO BOX 1335
 BURLINGTON, NC
 US 27216
 Contact: KAREN NEWPORT
 Gsmaterials@windstream.net
 T: (919)499-9322
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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)