



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/500 Hour CSA
Machine Id
VOLVO A40G 2331 (S/N A40GV752021)
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		ASC0011345	ASC0008505	ASC0006132
Sample Date		Client Info		23 May 2024	29 Feb 2024	05 Dec 2023
Machine Age	hrs	Client Info		1984	1491	1019
Oil Age	hrs	Client Info		1984	1491	1019
Filter Age	hrs	Client Info		984	1491	1019
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	5	0	2
Chromium	ppm	ASTM D5185m	>20	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	<1
Lead	ppm	ASTM D5185m	>20	2	<1	1
Copper	ppm	ASTM D5185m	>150	3	0	2
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

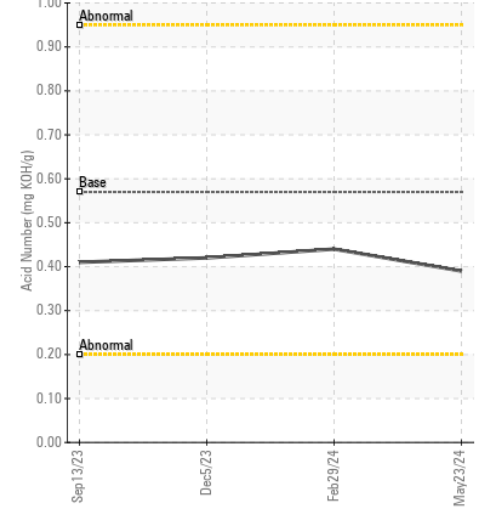
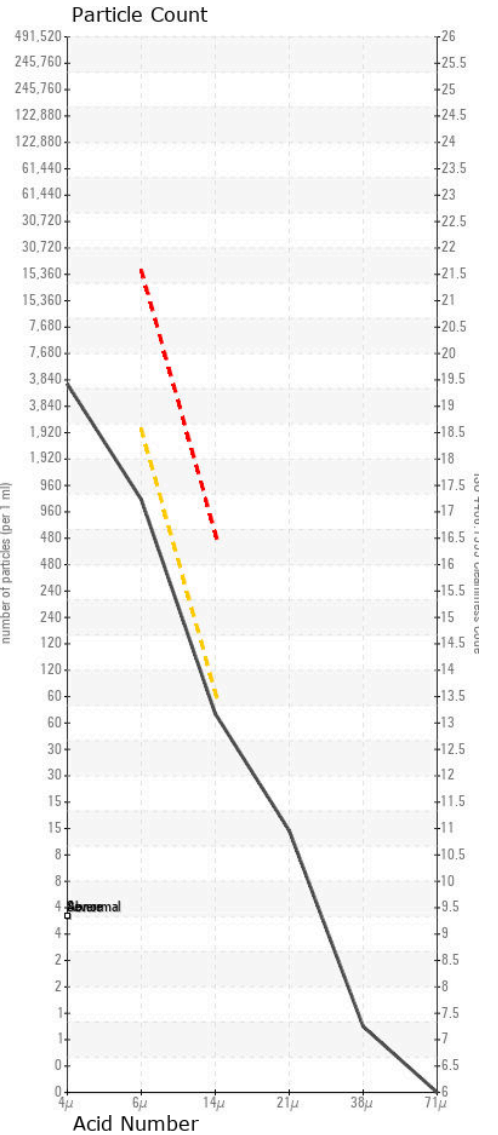
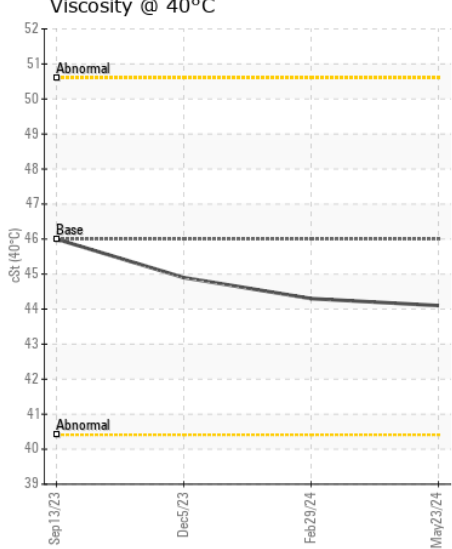
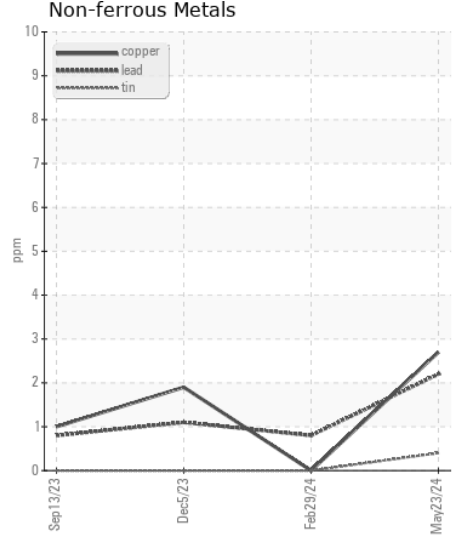
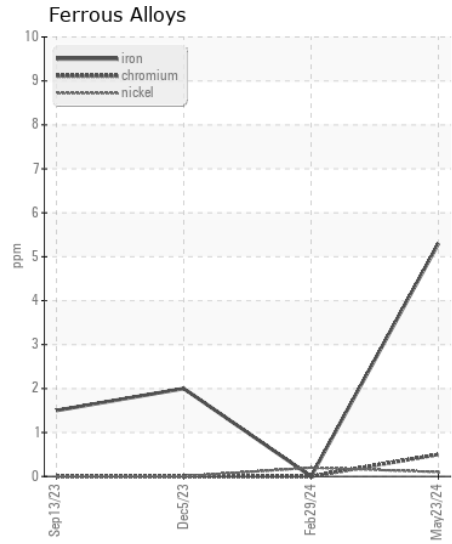
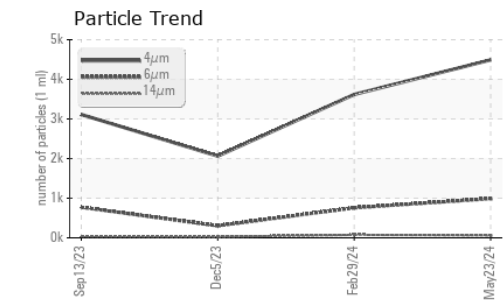
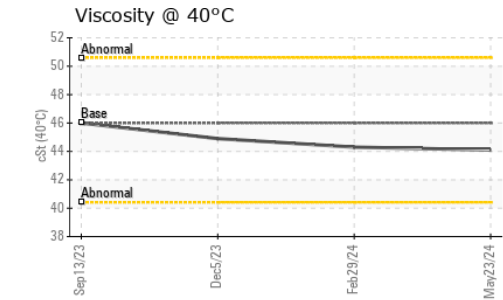
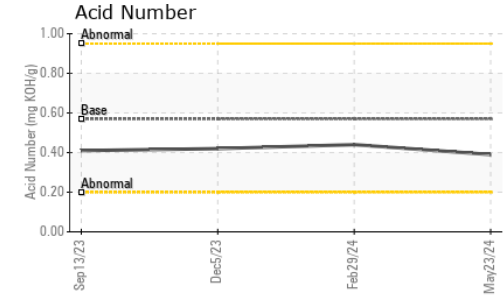
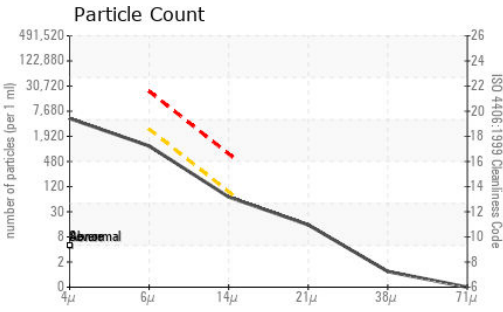
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	6	2	3
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		4491	3618	2062
Particles >6µm		ASTM D7647	>2500	989	757	305
Particles >14µm		ASTM D7647	>80	60	75	25
Particles >21µm		ASTM D7647	>20	13	17	8
Particles >38µm		ASTM D7647	>4	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/18/13	19/17/13	19/17/13	18/15/12
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	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	<1
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	1	0
Molybdenum	ppm	ASTM D5185m	5	0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m	25	2	2	0
Calcium	ppm	ASTM D5185m	200	83	77	76
Phosphorus	ppm	ASTM D5185m	300	356	325	350
Zinc	ppm	ASTM D5185m	370	452	426	433
Sulfur	ppm	ASTM D5185m	2500	2347	1938	2176
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.39	0.44	0.42
Visc @ 40°C	cSt	ASTM D445	46	44.1	44.3	44.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011345 **Received** : 30 May 2024
Lab Number : 06195336 **Tested** : 31 May 2024
Unique Number : 11057459 **Diagnosed** : 31 May 2024 - Wes Davis
Test Package : CONST

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 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)