



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ATTENTION



Machine Id
VOLVO A40G 341237
Component
Hydraulic System
Fluid
AW HYDRAULIC OIL ISO 32 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0010039	VCP411923	VCP426613
Sample Date		Client Info		18 Apr 2024	27 Jul 2023	24 Mar 2023
Machine Age	hrs	Client Info		8907	7468	6717
Oil Age	hrs	Client Info		1000	0	0
Filter Age	hrs	Client Info		1000	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Changed	Not Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	21	13	24
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	13	7	13
Lead	ppm	ASTM D5185m	>20	2	1	3
Copper	ppm	ASTM D5185m	>150	10	8	16
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

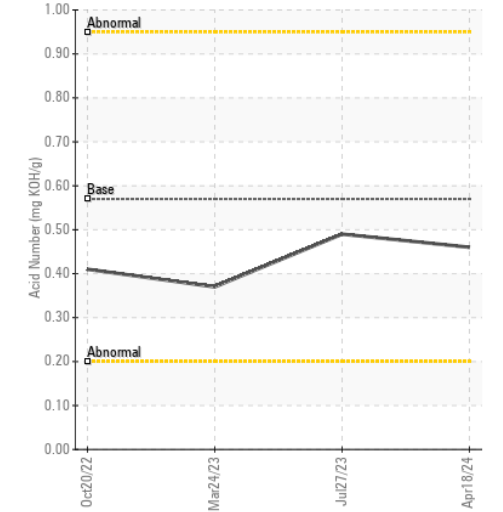
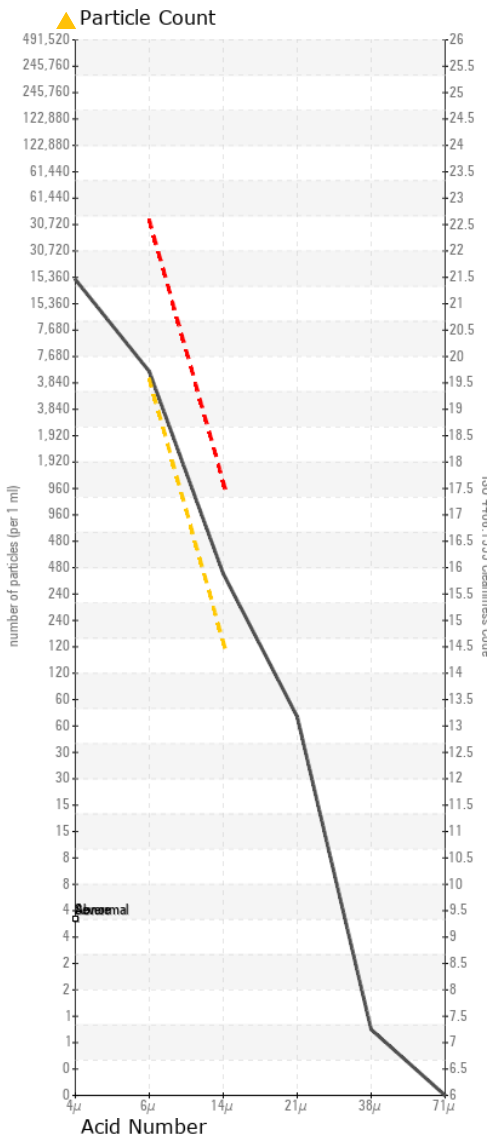
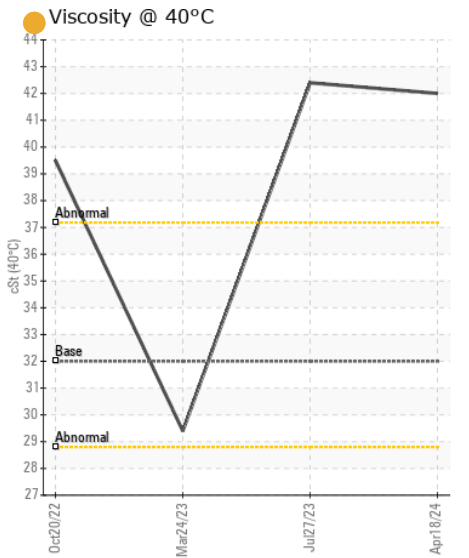
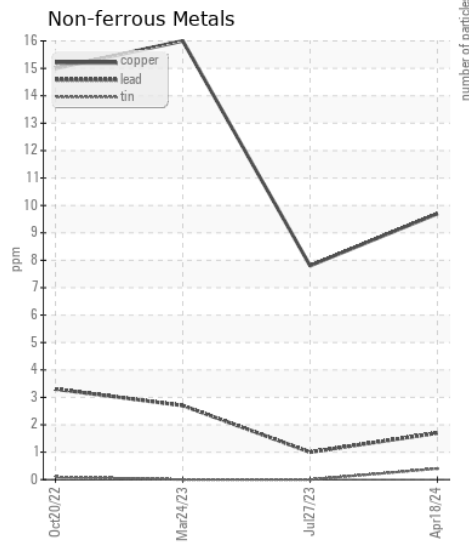
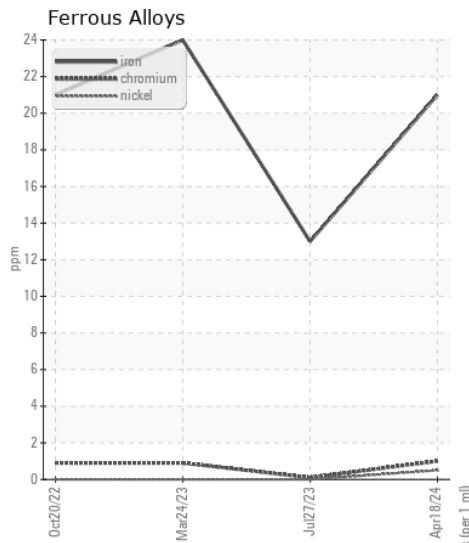
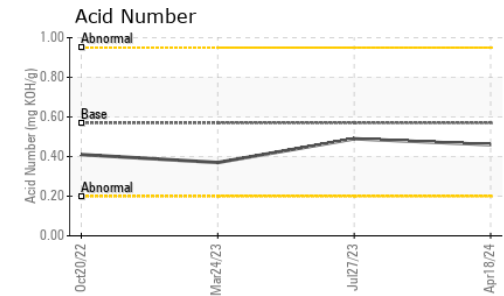
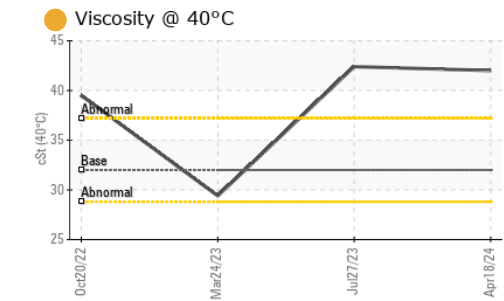
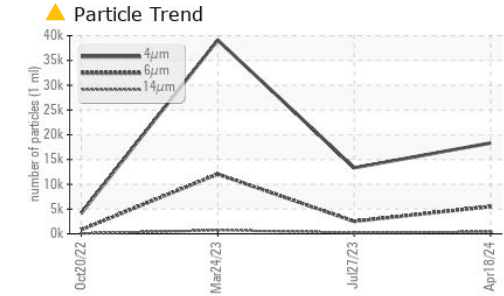
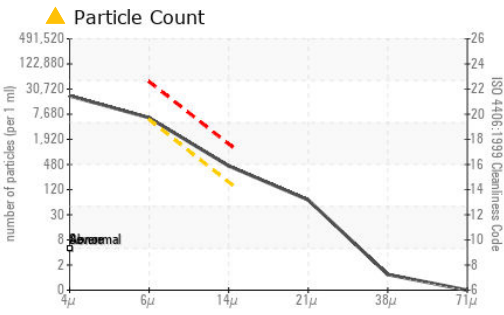
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	18	9	17
Potassium	ppm	ASTM D5185m	>20	2	<1	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		18336	13328	39118
Particles >6µm		ASTM D7647	>5000	▲ 5500	2504	▲ 12045
Particles >14µm		ASTM D7647	>160	▲ 390	● 239	▲ 713
Particles >21µm		ASTM D7647	>40	▲ 60	● 88	▲ 111
Particles >38µm		ASTM D7647	>10	1	10	6
Particles >71µm		ASTM D7647	>3	0	2	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	▲ 21/20/16	● 21/19/15	▲ 22/21/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	LIGHT
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

Viscosity of sample indicates oil is within ISO 46 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

Sodium	ppm	ASTM D5185m		1	3	4
Boron	ppm	ASTM D5185m	5	0	0	0
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	25	6	1	10
Calcium	ppm	ASTM D5185m	200	102	96	162
Phosphorus	ppm	ASTM D5185m	300	329	363	378
Zinc	ppm	ASTM D5185m	370	455	455	485
Sulfur	ppm	ASTM D5185m	2500	2049	2345	3673
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.46	0.49	0.37
Visc @ 40°C	cSt	ASTM D445	32	● 42.0	● 42.4	29.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0010039
Lab Number : 06157617
Unique Number : 10993040
Test Package : CONST
Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 25 Apr 2024 - Don Baldrige

HANSON SOUTHEAST
 NC HWY 117
 ERWIN, NC
 US 28339
 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)

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F: