



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A40G 341147
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006150	VCP412007	VCP420401
Sample Date		Client Info		19 Dec 2023	20 Jul 2023	01 Jun 2023
Machine Age	hrs	Client Info		13778	13573	13304
Oil Age	hrs	Client Info		12186	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	9	9	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	3
Lead	ppm	ASTM D5185m	>20	3	3	2
Copper	ppm	ASTM D5185m	>150	3	3	3
Tin	ppm	ASTM D5185m	>20	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

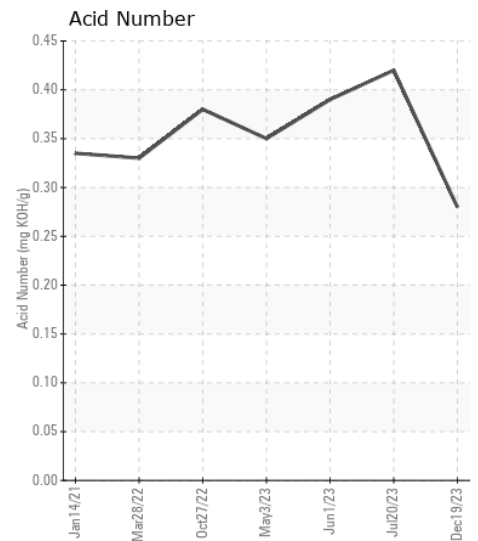
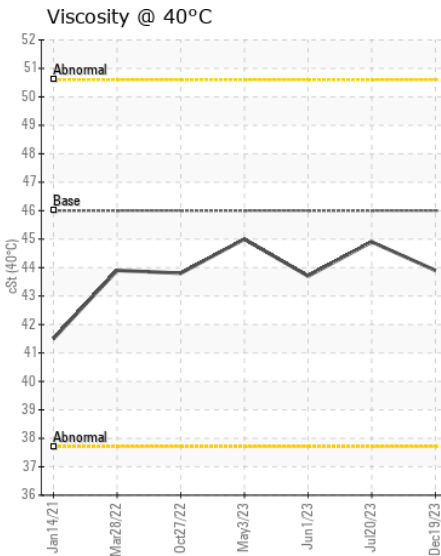
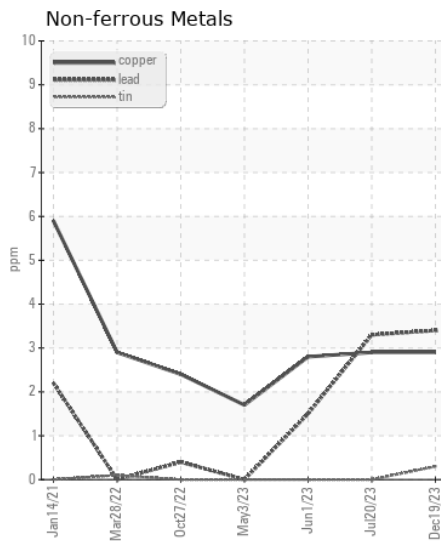
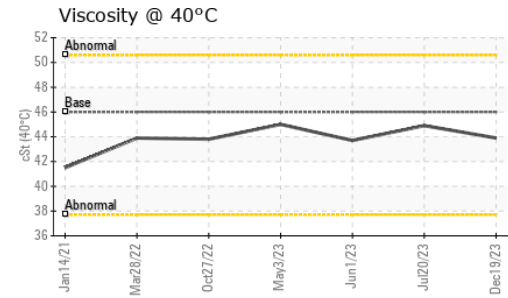
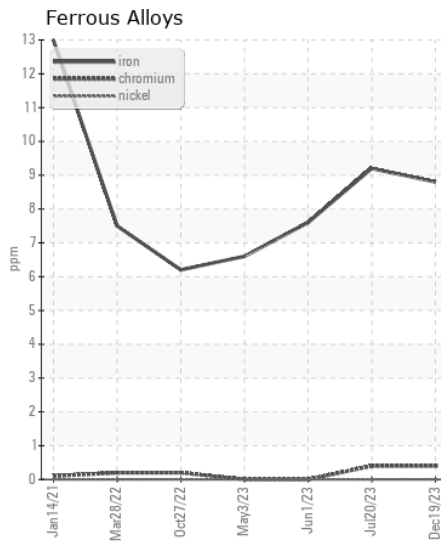
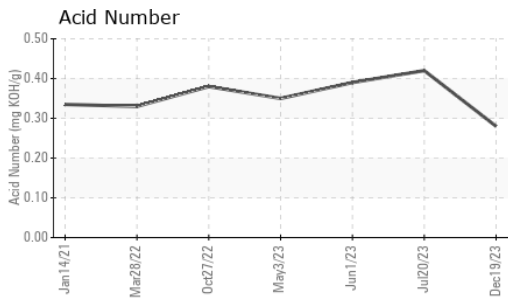
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	5	6	5
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647		---	---	49853
Particles >6µm		ASTM D7647	>5000	---	---	▲ 16216
Particles >14µm		ASTM D7647	>160	---	---	▲ 664
Particles >21µm		ASTM D7647	>40	---	---	▲ 84
Particles >38µm		ASTM D7647	>10	---	---	3
Particles >71µm		ASTM D7647	>3	---	---	0
Oil Cleanliness		ISO 4406 (c)	>-/19/14	---	---	▲ 23/21/17
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MDHVV	▲ MODER	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

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	2	5
Boron	ppm	ASTM D5185m	14	0	0	0
Barium	ppm	ASTM D5185m	0.0	0	2	0
Molybdenum	ppm	ASTM D5185m	0.0	<1	<1	0
Manganese	ppm	ASTM D5185m	0.0	<1	0	0
Magnesium	ppm	ASTM D5185m	2.6	31	34	34
Calcium	ppm	ASTM D5185m	49	264	159	170
Phosphorus	ppm	ASTM D5185m	354	386	341	348
Zinc	ppm	ASTM D5185m	419	438	414	403
Sulfur	ppm	ASTM D5185m	3719	1770	1753	1920
Acid Number (AN)	mg KOH/g	ASTM D8045		0.28	0.42	0.39
Visc @ 40°C	cSt	ASTM D445	46	43.9	44.9	43.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0006150 **Received** : 11 Jan 2024
Lab Number : 06058009 **Diagnosed** : 12 Jan 2024
Unique Number : 10829391 **Diagnostician** : Don Baldrige
Test Package : CONST

Hanson Aggregates - Rocky Mount
 10471 NC 97
 ROCKY MOUNT, NC
 US 27801
 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: