



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A30G 752919
Component
Diesel Engine
Fluid
VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011251	ASC0002573	VCP423961
Sample Date		Client Info		17 Jun 2024	22 Nov 2023	16 Aug 2023
Machine Age	hrs	Client Info		3027	1990	1356
Oil Age	hrs	Client Info		500	634	0
Filter Age	hrs	Client Info		500	634	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	11	16
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	<1	<1	1
Aluminum	ppm	ASTM D5185m	>25	2	2	1
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	1	26	▲ 135
Tin	ppm	ASTM D5185m	>15	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

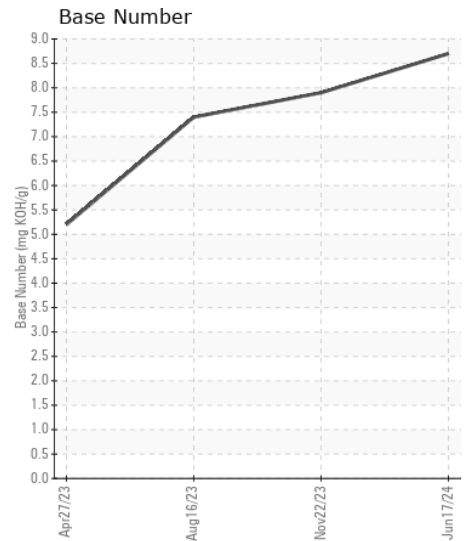
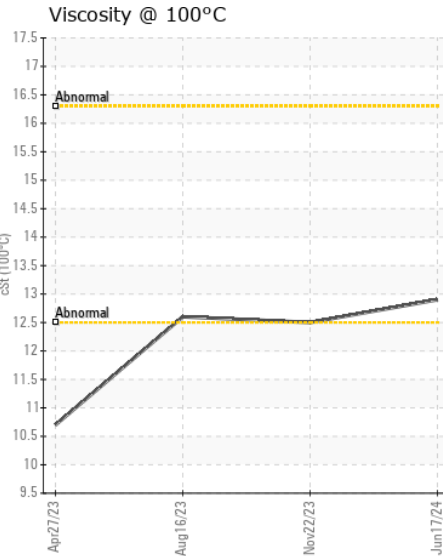
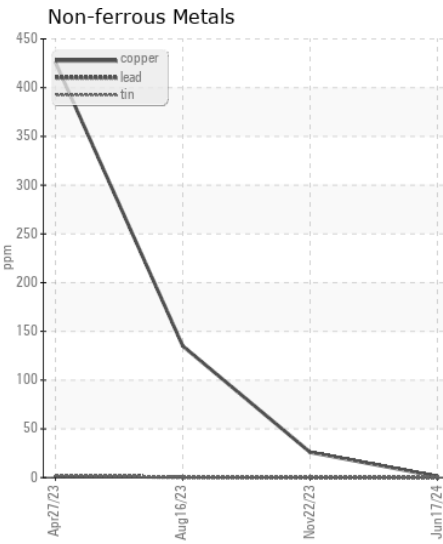
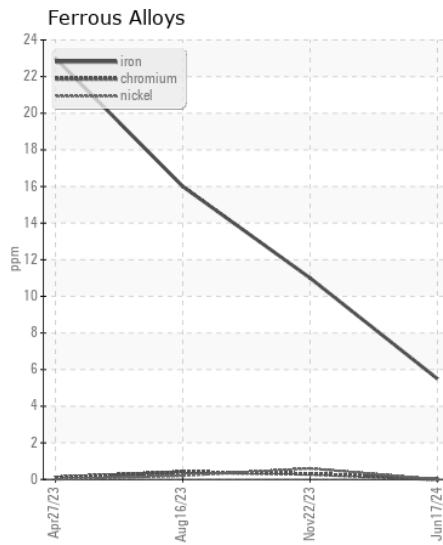
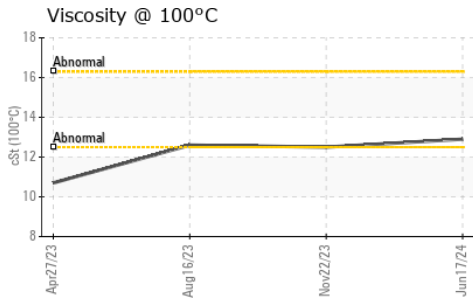
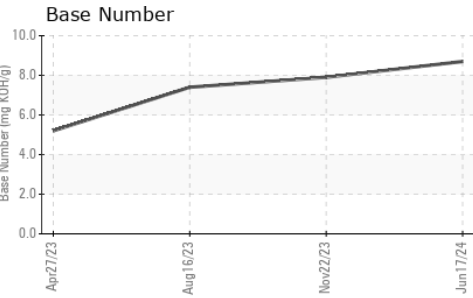
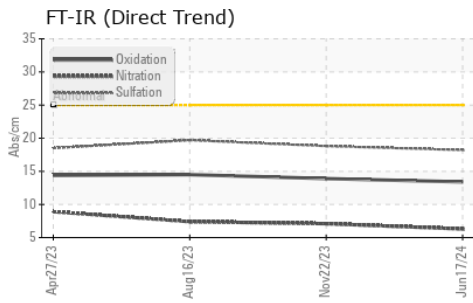
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	4	7
Potassium	ppm	ASTM D5185m	>20	2	2	2
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.3	7.1	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.2	18.8	19.7
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	<1	0
Boron	ppm	ASTM D5185m		6	9	4
Barium	ppm	ASTM D5185m		0	0	2
Molybdenum	ppm	ASTM D5185m		57	63	63
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		948	930	782
Calcium	ppm	ASTM D5185m		1058	1067	1222
Phosphorus	ppm	ASTM D5185m		1085	1073	994
Zinc	ppm	ASTM D5185m		1241	1260	1164
Sulfur	ppm	ASTM D5185m		3709	3173	2886
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	13.9	14.5
Base Number (BN)	mg KOH/g	ASTM D2896		8.7	7.9	7.4
Visc @ 100°C	cSt	ASTM D445		12.9	12.5	12.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : ASC0011251

Lab Number : 06214449

Unique Number : 11087313

Test Package : CONST (Additional Tests: TBN)

Received : 19 Jun 2024

Tested : 20 Jun 2024

Diagnosed : 21 Jun 2024 - Don Baldrige

CARDINAL CIVIL

4700 FALLS OF NEUSE RD, SUITE 370

RALEIGH, NC

US 27609

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)

T: (919)324-1964

F: