



VOLVO

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
[G08826]
 Machine Id
VOLVO A40D 70043
 Component
Diesel Engine
 Fluid
{not provided} (--- 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		VCP453762	VCP232717	VCP232117
Sample Date		Client Info		22 May 2024	17 Jul 2019	29 Jan 2019
Machine Age	hrs	Client Info		15722	0	11200
Oil Age	hrs	Client Info		0	0	400
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ATTENTION	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	19	14	16
Chromium	ppm	ASTM D5185m	>10	1	<1	<1
Nickel	ppm	ASTM D5185m	>10	1	<1	<1
Titanium	ppm	ASTM D5185m		5	<1	2
Silver	ppm	ASTM D5185m	>2	1	0	0
Aluminum	ppm	ASTM D5185m	>10	4	3	3
Lead	ppm	ASTM D5185m	>20	2	4	2
Copper	ppm	ASTM D5185m	>15	2	1	2
Tin	ppm	ASTM D5185m	>10	1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

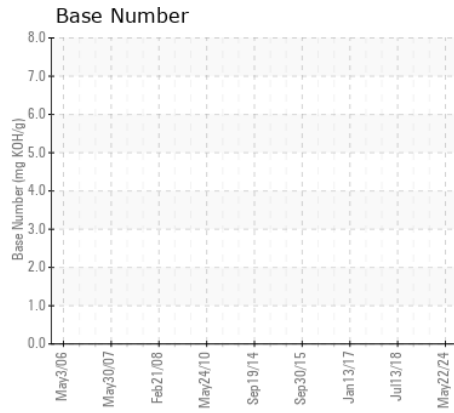
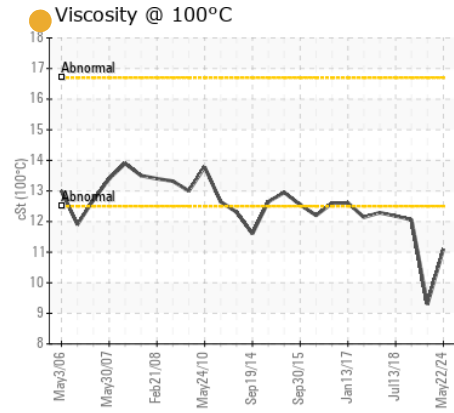
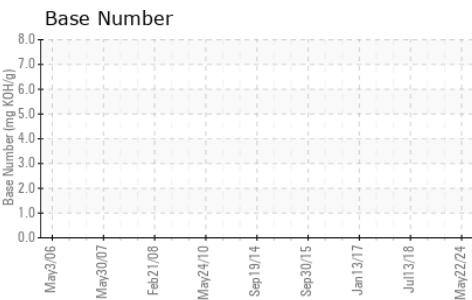
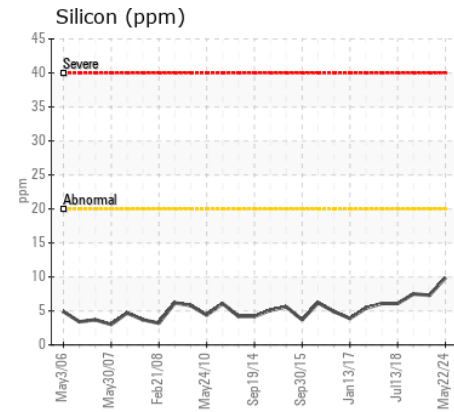
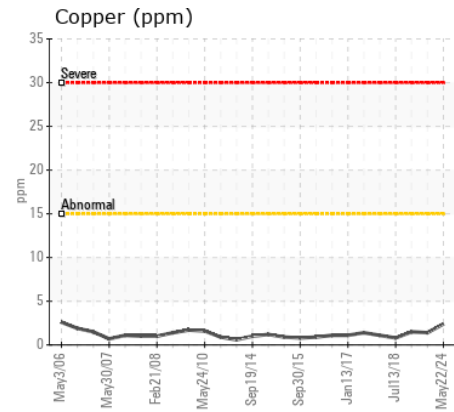
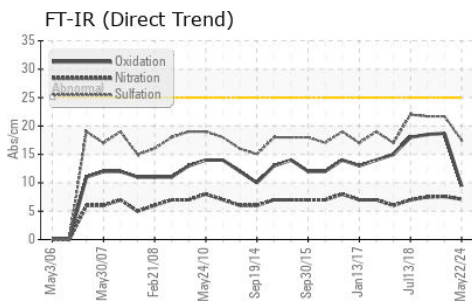
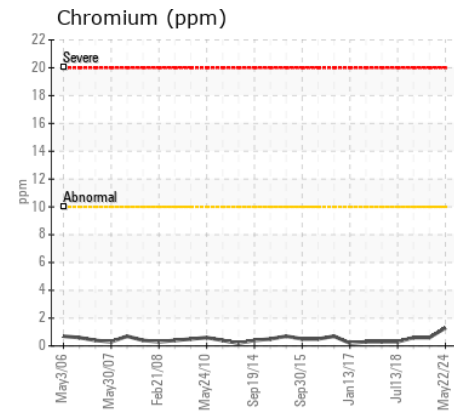
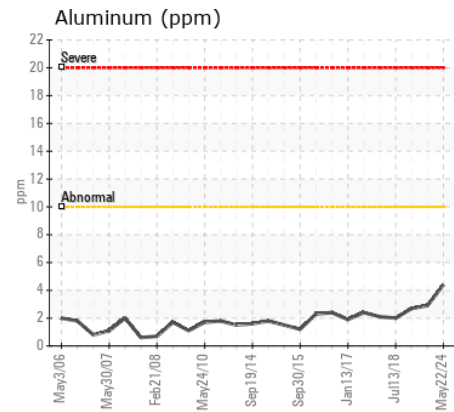
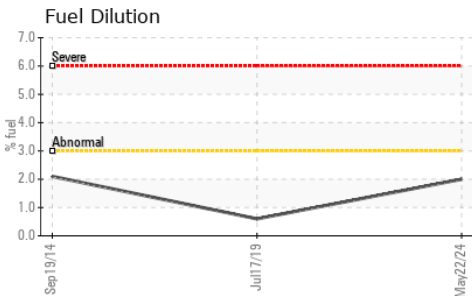
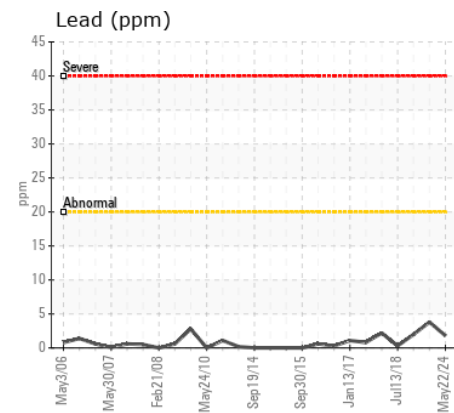
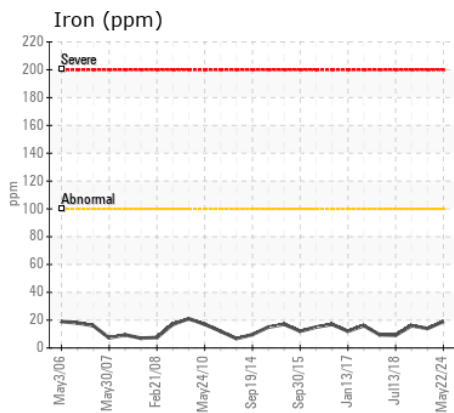
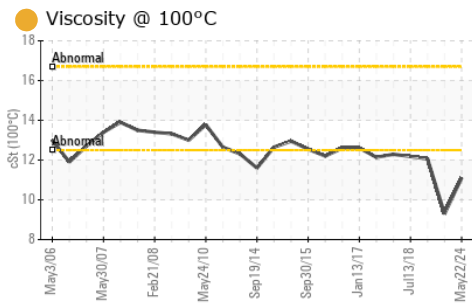
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	10	7	8
Potassium	ppm	ASTM D5185m	>20	3	35	0
Fuel	%	ASTM D3524	>3.0	2.0	0.6	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.8	0.8
Nitration	Abs/cm	*ASTM D7624	>20	7.1	7.6	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.5	21.7	21.7
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		3	25	17
Boron	ppm	ASTM D5185m		31	30	33
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		15	44	43
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		193	550	549
Calcium	ppm	ASTM D5185m		2654	1724	1732
Phosphorus	ppm	ASTM D5185m		1075	738	756
Zinc	ppm	ASTM D5185m		1284	864	873
Sulfur	ppm	ASTM D5185m		4873	2134	2278
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.4	18.7	18.5
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	---	---
Visc @ 100°C	cSt	ASTM D445		11.1	9.3	12.06



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : VCP453762
Lab Number : 06193665
Unique Number : 11050417
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 29 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Don Baldrige

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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)