



ASCENDUM

OIL ANALYSIS REPORT

WEAR

ABNORMAL

CONTAMINATION

NORMAL

FLUID CONDITION

NORMAL



Area

Ascendum Machinery/500 Hour CSA

Machine Id

VOLVO A40G 2332 (S/N A40GV752022)

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 30 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011175	ASC0008589	ASC0002676
Sample Date		Client Info		24 Jun 2024	15 Feb 2024	01 Dec 2023
Machine Age	hrs	Client Info		2033	1462	1107
Oil Age	hrs	Client Info		500	462	600
Filter Age	hrs	Client Info		500	462	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	NORMAL

WEAR

Exhaust valve wear is indicated.

Iron	ppm	ASTM D5185m	>100	8	2	12
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	▲ 4	▲ 6	2
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	<1	1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	33	25	102
Tin	ppm	ASTM D5185m	>15	<1	0	<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

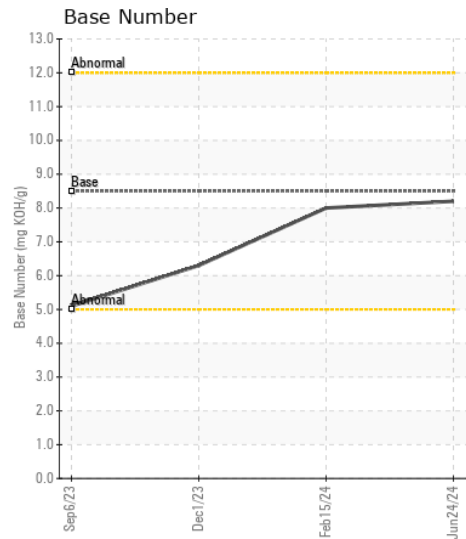
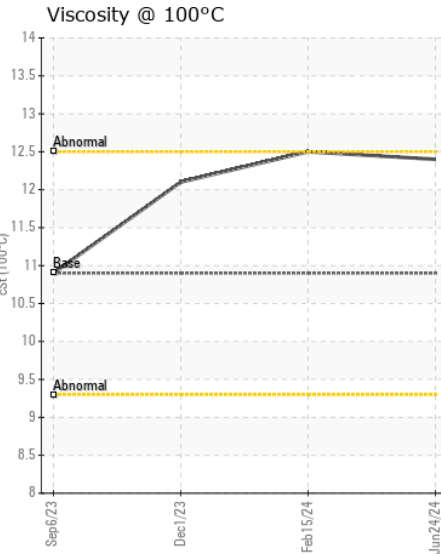
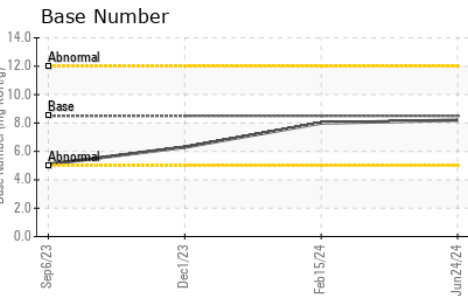
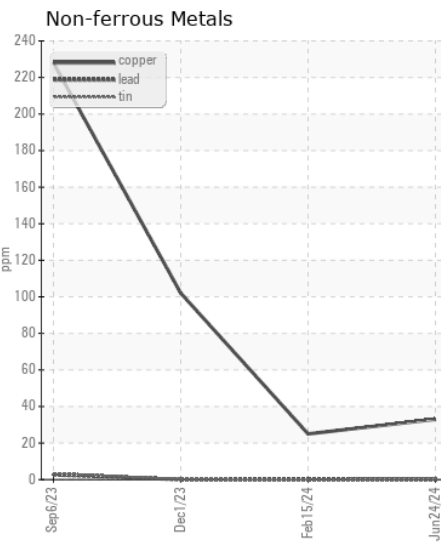
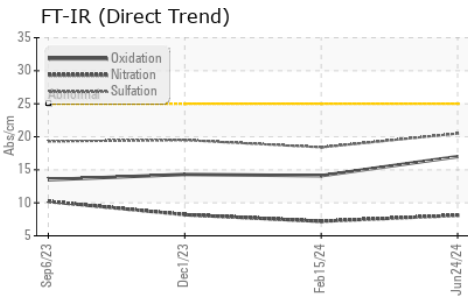
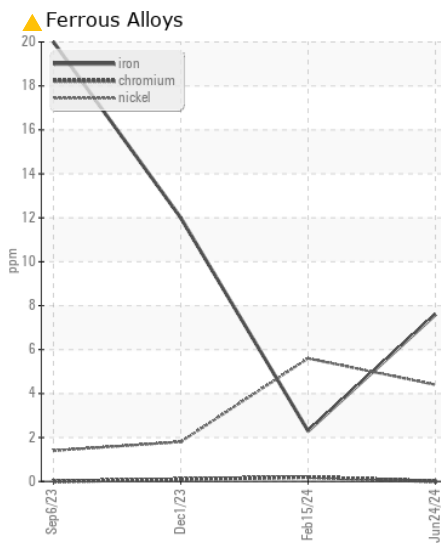
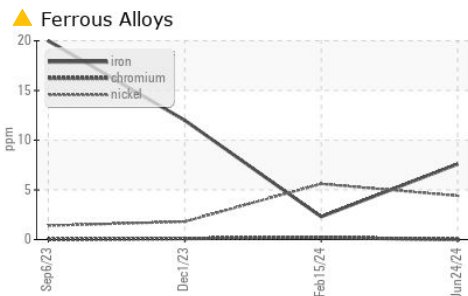
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	4	8
Potassium	ppm	ASTM D5185m	>20	2	0	1
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	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.1	7.2	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	18.4	19.5
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	>75	14	0	0
Boron	ppm	ASTM D5185m	250	14	5	5
Barium	ppm	ASTM D5185m	10	0	0	2
Molybdenum	ppm	ASTM D5185m	100	51	54	64
Manganese	ppm	ASTM D5185m		1	<1	0
Magnesium	ppm	ASTM D5185m	450	779	820	770
Calcium	ppm	ASTM D5185m	3000	1352	991	1175
Phosphorus	ppm	ASTM D5185m	1150	1008	905	910
Zinc	ppm	ASTM D5185m	1350	1207	1110	1133
Sulfur	ppm	ASTM D5185m	4250	3507	2677	3167
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.0	14.1	14.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.2	8.0	6.3
Visc @ 100°C	cSt	ASTM D445	10.9	12.4	12.5	12.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0011175 **Received** : 26 Jun 2024
Lab Number : 06220654 **Tested** : 27 Jun 2024
Unique Number : 11098851 **Diagnosed** : 27 Jun 2024 - Angela Borella
Test Package : CONST (Additional Tests: TBN)

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Certificate L2367
 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)