CONST ASCENDUM

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
VOLVO A45G 590 (S/N 352994)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (--- 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.

WEAR

Valve wear is indicated. All other component wear rates are normal.

CONTAMINATION

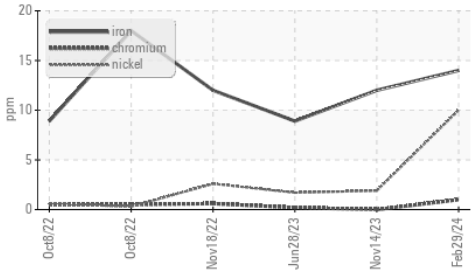
There is no indication of any contamination in the oil.

FLUID CONDITION

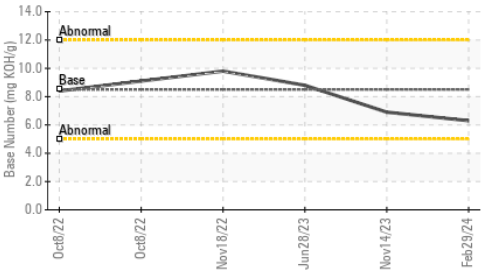
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0002908	VCP412176	VCP425948
Sample Date		Client Info		29 Feb 2024	14 Nov 2023	28 Jun 2023
Machine Age	hrs	Client Info		5752	4860	4181
Oil Age	hrs	Client Info		500	0	0
Filter Age	hrs	Client Info		500	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	14	12	9
Chromium	ppm	ASTM D5185m	>20	1	0	<1
Nickel	ppm	ASTM D5185m	>2	▲ 10	2	2
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	2	2
Lead	ppm	ASTM D5185m	>40	2	1	<1
Copper	ppm	ASTM D5185m	>330	3	16	2
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
Silicon	ppm	ASTM D5185m	>25	5	3	4
Potassium	ppm	ASTM D5185m	>20	<1	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	0.5	0.6	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.5	10.1	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.3	19.8	19.6
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
Sodium	ppm	ASTM D5185m	>216	2	2	0
Boron	ppm	ASTM D5185m	250	2	<1	4
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	68	61	74
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	1022	1062	1071
Calcium	ppm	ASTM D5185m	3000	1182	1214	1238
Phosphorus	ppm	ASTM D5185m	1150	1126	1161	1214
Zinc	ppm	ASTM D5185m	1350	1321	1307	1443
Sulfur	ppm	ASTM D5185m	4250	3286	3330	3795
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	16.0	15.1
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.3	6.9	8.8
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	12.7	13.1

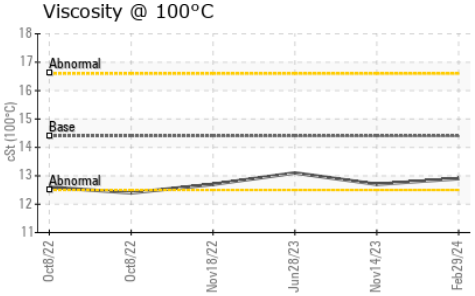
Ferrous Alloys



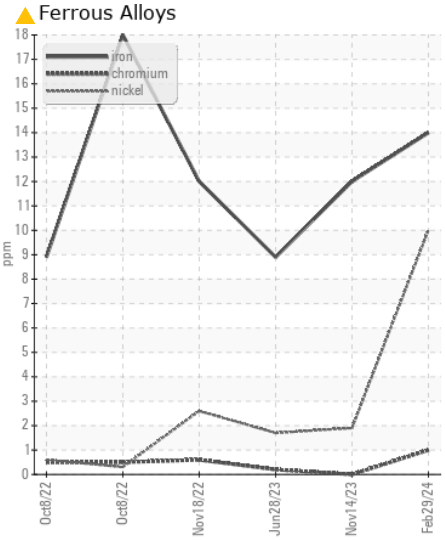
Base Number



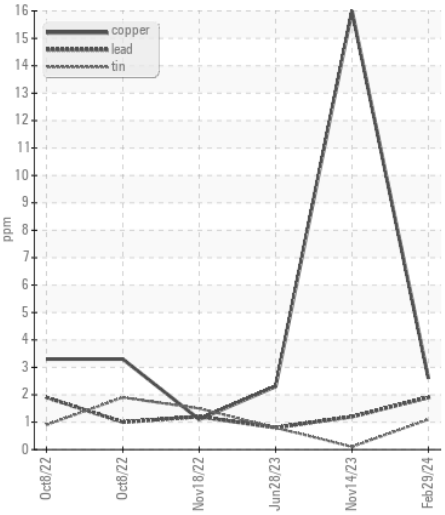
Viscosity @ 100°C



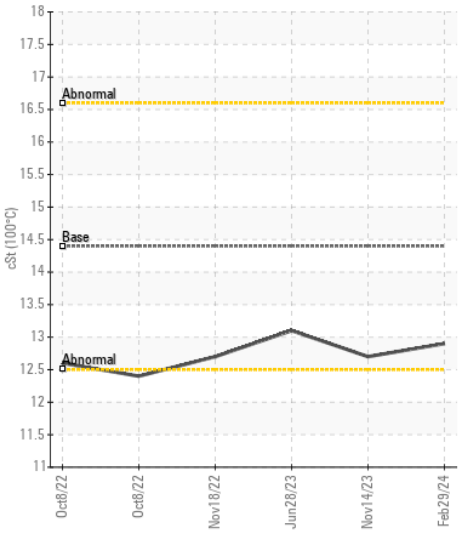
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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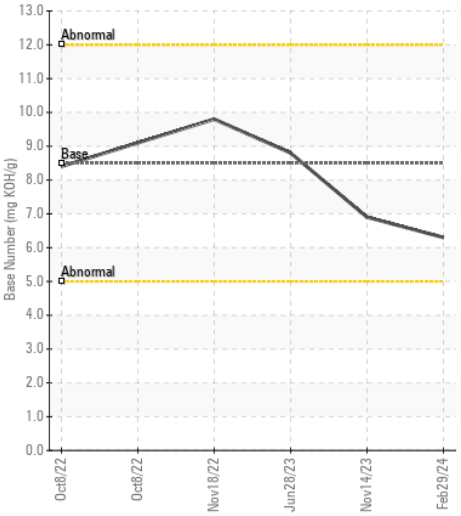

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0002908
Lab Number : 06121400
Unique Number : 10930233
Test Package : CONST (Additional Tests: TBN)

Received : 18 Mar 2024
Tested : 19 Mar 2024
Diagnosed : 20 Mar 2024 - Don Baldridge

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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