



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
VOLVO A45G 13418 (S/N 752224)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

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		ASC0008812	ASC0008823	ASC0008508
Sample Date		Client Info		14 May 2024	03 Apr 2024	23 Feb 2024
Machine Age	hrs	Client Info		2034	1399	750
Oil Age	hrs	Client Info		1385	649	750
Filter Age	hrs	Client Info		0	0	750
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	15	27	30
Chromium	ppm	ASTM D5185m	>20	<1	2	1
Nickel	ppm	ASTM D5185m	>2	2	4	3
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	3	3	4
Lead	ppm	ASTM D5185m	>40	<1	2	1
Copper	ppm	ASTM D5185m	>330	28	203	309
Tin	ppm	ASTM D5185m	>15	2	4	6
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

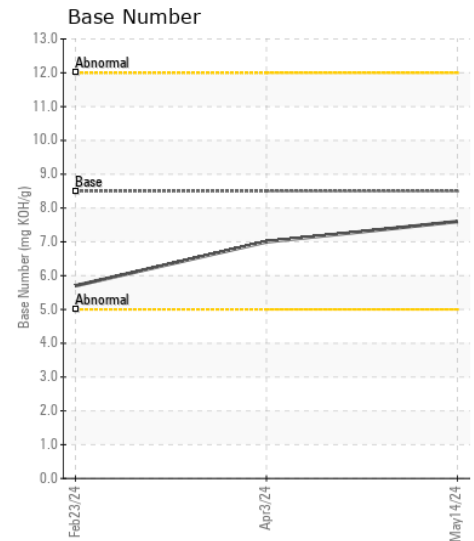
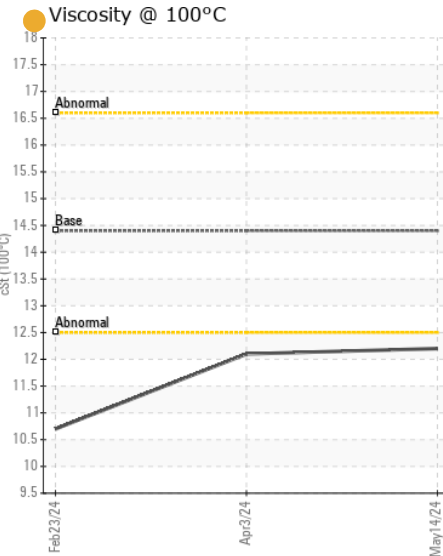
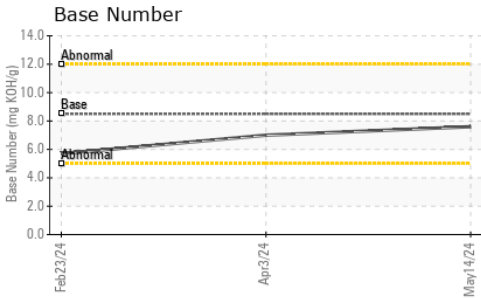
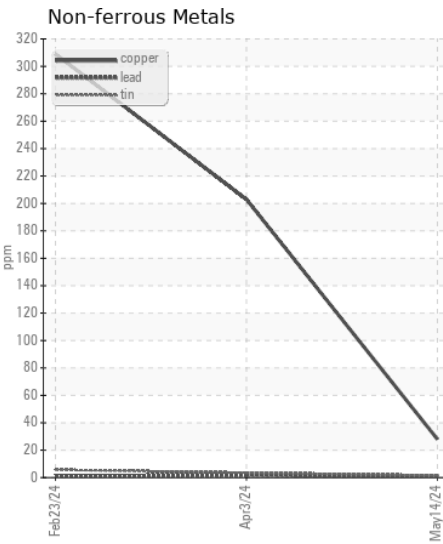
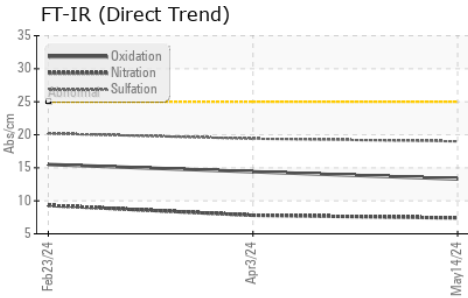
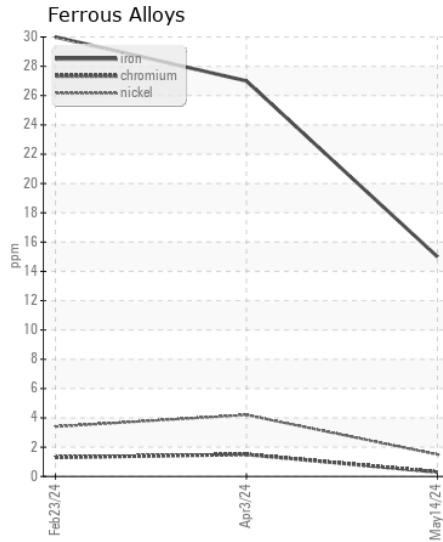
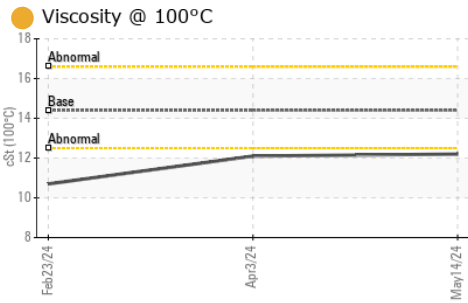
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	11	27
Potassium	ppm	ASTM D5185m	>20	1	3	2
Fuel		WC Method	>6.0	<1.0	<1.0	0.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.8	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	19.4	20.2
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	2	<1	4
Boron	ppm	ASTM D5185m	250	2	5	30
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	59	98	92
Manganese	ppm	ASTM D5185m		<1	1	2
Magnesium	ppm	ASTM D5185m	450	882	1191	33
Calcium	ppm	ASTM D5185m	3000	1034	1729	2295
Phosphorus	ppm	ASTM D5185m	1150	992	1320	1016
Zinc	ppm	ASTM D5185m	1350	1160	1737	1200
Sulfur	ppm	ASTM D5185m	4250	3101	4013	3549
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.3	14.4	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.6	7.0	5.7
Visc @ 100°C	cSt	ASTM D445	14.4	12.2	12.1	10.7



Certificate L2367

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

Sample No. : ASC0008812

Lab Number : 06193739

Unique Number : 11050491

Test Package : CONST (Additional Tests: TBN)

Received : 29 May 2024

Tested : 30 May 2024

Diagnosed : 30 May 2024 - Sean Felton

117 - ASCENDUM MACHINERY INC - GREENVILLE

2002 N GREENE ST

GREENVILLE, NC

US 27834

Contact: ALLEN WILLIAMS

allen.williams@ascendummachinery.com

T:

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)

F: (704)494-8197