



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45GFS 352239
Component
Diesel Engine
Fluid
VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0011071	ASC0010372	VCP441100
Sample Date		Client Info		29 May 2024	21 Mar 2024	23 Oct 2023
Machine Age	hrs	Client Info		4667	4399	3887
Oil Age	hrs	Client Info		268	512	0
Filter Age	hrs	Client Info		268	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	3	10	14
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>2	3	3	2
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	2	<1	2
Lead	ppm	ASTM D5185m	>40	0	<1	3
Copper	ppm	ASTM D5185m	>330	3	4	4
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

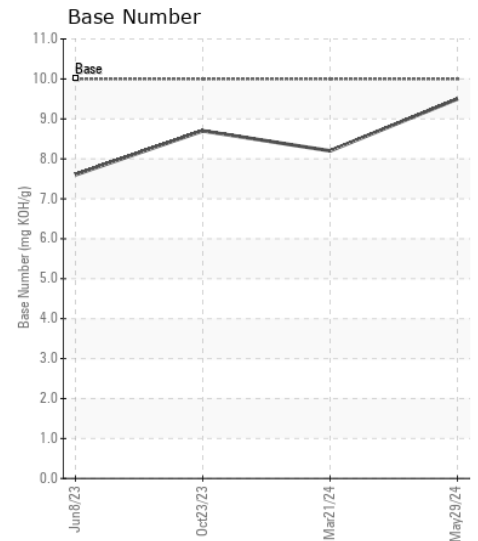
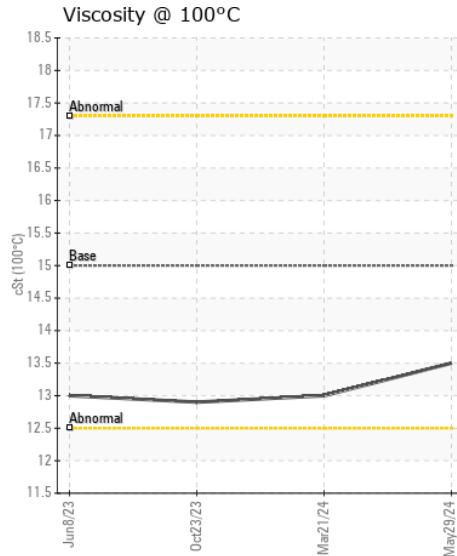
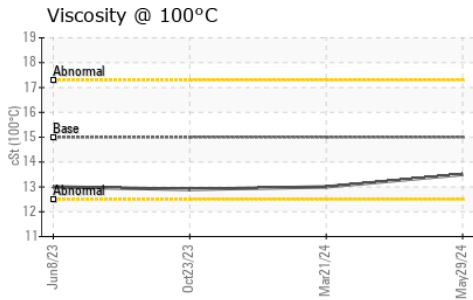
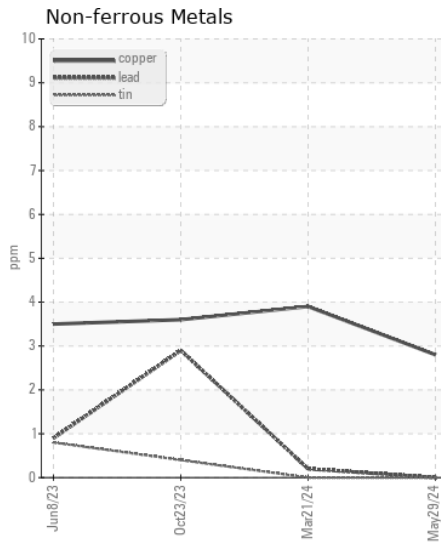
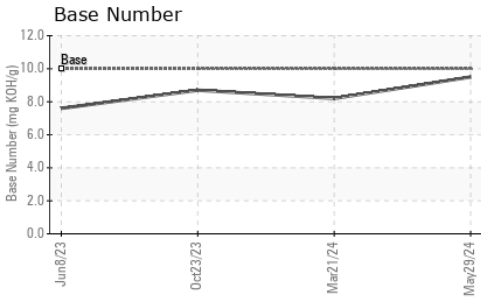
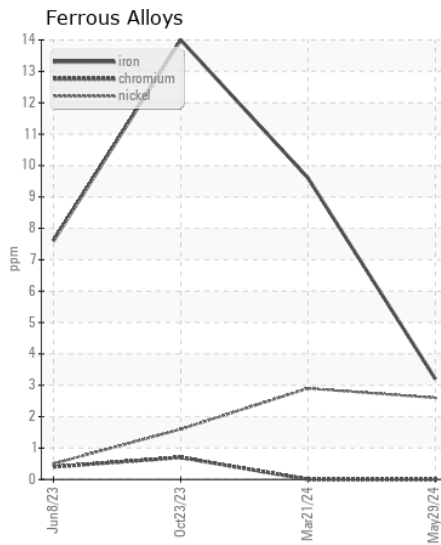
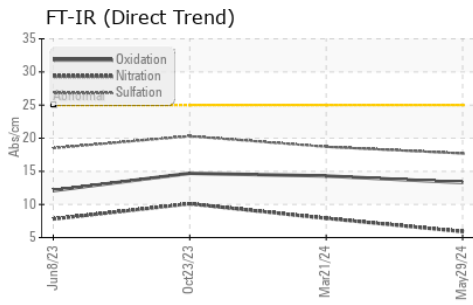
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	2	3	5
Potassium	ppm	ASTM D5185m	>20	19	31	173
Fuel		WC Method	>6.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	0.0	0.10
Soot %	%	*ASTM D7844	>3	0.1	0.4	0.6
Nitration	Abs/cm	*ASTM D7624	>20	5.9	7.9	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	18.7	20.3
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		41	127	762
Boron	ppm	ASTM D5185m	2.5	4	<1	<1
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.7	57	60	77
Manganese	ppm	ASTM D5185m	0.0	<1	0	<1
Magnesium	ppm	ASTM D5185m	256	921	920	911
Calcium	ppm	ASTM D5185m	2057	1045	1128	1177
Phosphorus	ppm	ASTM D5185m	935	1046	1012	937
Zinc	ppm	ASTM D5185m	1223	1236	1163	1300
Sulfur	ppm	ASTM D5185m	4079	3654	3453	3232
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.3	14.3	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	10	9.5	8.2	8.7
Visc @ 100°C	cSt	ASTM D445	15.0	13.5	13.0	12.9



Certificate L2367

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

Sample No. : ASC0011071

Lab Number : 06212741

Unique Number : 11085605

Test Package : CONST (Additional Tests: TBN)

Received : 17 Jun 2024

Tested : 19 Jun 2024

Diagnosed : 19 Jun 2024 - Angela Borella

117 - ASCENDUM MACHINERY INC - GREENVILLE

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GREENVILLE, NC

US 27834

Contact: ALLEN WILLIAMS

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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)

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