



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
VOLVO A45G 752046
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 30 (--- 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		ASC0008840	ASC0002543	VCP432560
Sample Date		Client Info		14 May 2024	03 Apr 2024	05 Dec 2023
Machine Age	hrs	Client Info		2503	657	657
Oil Age	hrs	Client Info		2503	657	0
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				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	17	24
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>2	3	6	3
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	3	2
Lead	ppm	ASTM D5185m	>40	2	2	5
Copper	ppm	ASTM D5185m	>330	9	46	▲ 371
Tin	ppm	ASTM D5185m	>15	2	2	5
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.

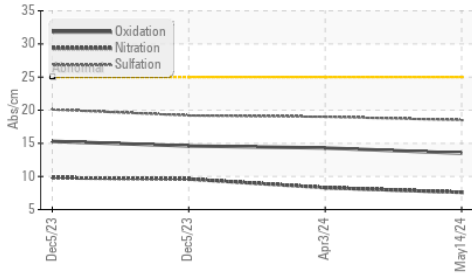
Silicon	ppm	ASTM D5185m	>25	4	5	26
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Fuel		WC Method	>6.0	<1.0	<1.0	0.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.5	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.3	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.5	19.0	19.2
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

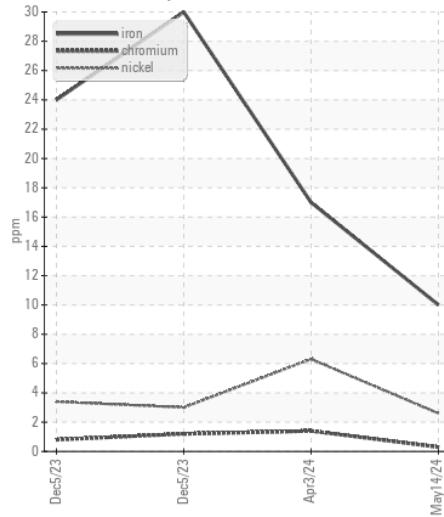
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>75	2	0	4
Boron	ppm	ASTM D5185m	250	13	2	31
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	59	61	81
Manganese	ppm	ASTM D5185m		<1	1	2
Magnesium	ppm	ASTM D5185m	450	888	824	33
Calcium	ppm	ASTM D5185m	3000	1045	1030	2424
Phosphorus	ppm	ASTM D5185m	1150	982	848	1064
Zinc	ppm	ASTM D5185m	1350	1164	1080	1193
Sulfur	ppm	ASTM D5185m	4250	3227	2767	3800
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.5	14.3	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.8	6.9	5.6
Visc @ 100°C	cSt	ASTM D445	10.9	12.0	12.2	10.6

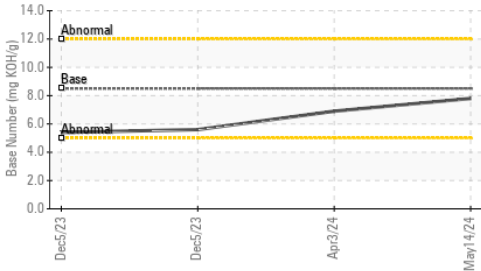
FT-IR (Direct Trend)



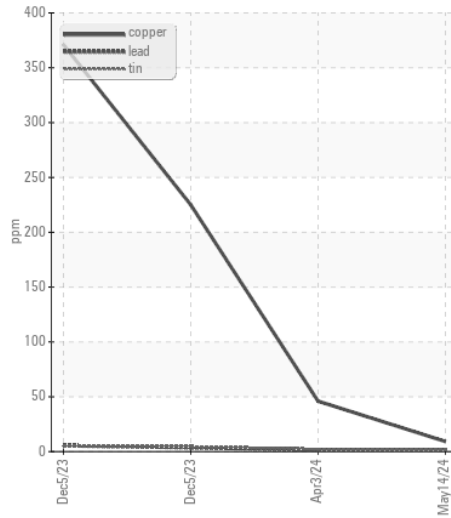
Ferrous Alloys



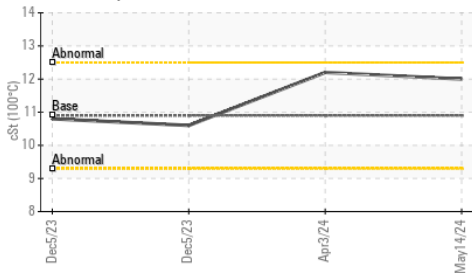
Base Number



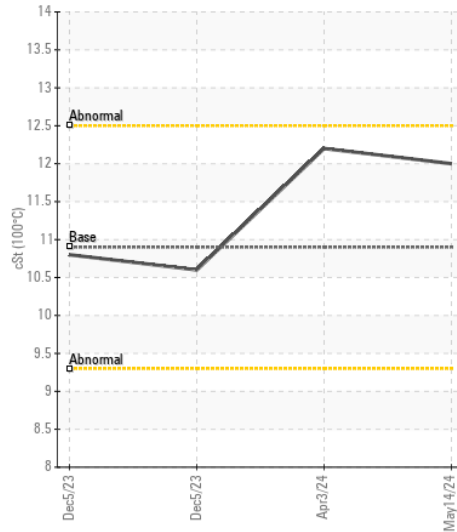
Non-ferrous Metals



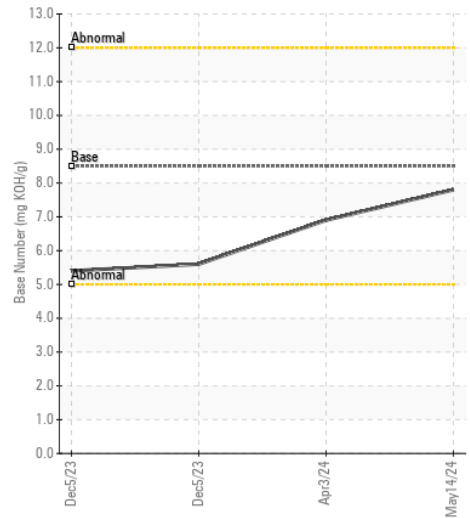
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : ASC0008840

Lab Number : 06193737

Unique Number : 11050489

Test Package : CONST (Additional Tests: TBN)

Received : 29 May 2024

Tested : 30 May 2024

Diagnosed : 30 May 2024 - Wes Davis

117 - ASCENDUM MACHINERY INC - GREENVILLE

2002 N GREENE ST

GREENVILLE, NC

US 27834

Contact: Brandon Lewis

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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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