



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. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0002543	VCP432560	VCP432558
Sample Date		Client Info		03 Apr 2024	05 Dec 2023	05 Dec 2023
Machine Age	hrs	Client Info		657	657	657
Oil Age	hrs	Client Info		657	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	17	24	30
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>2	6	3	3
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	3	2	3
Lead	ppm	ASTM D5185m	>40	2	5	4
Copper	ppm	ASTM D5185m	>330	46	▲ 371	225
Tin	ppm	ASTM D5185m	>15	2	5	5
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

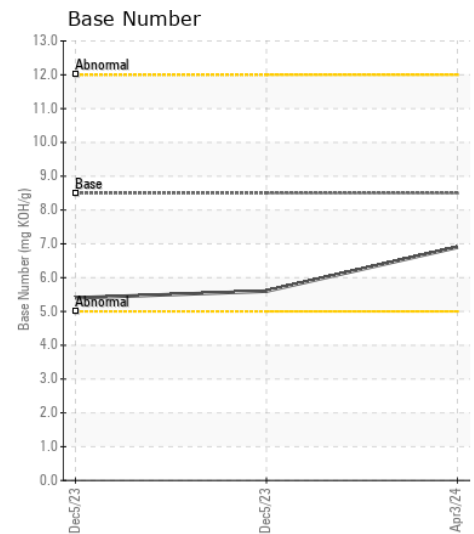
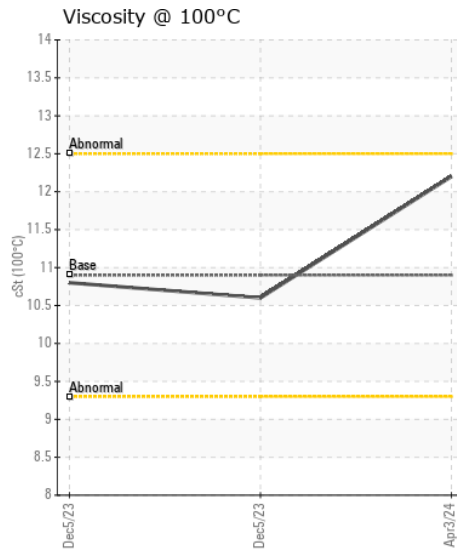
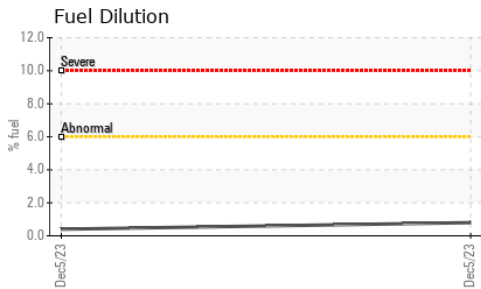
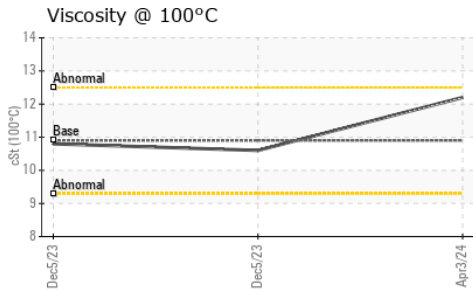
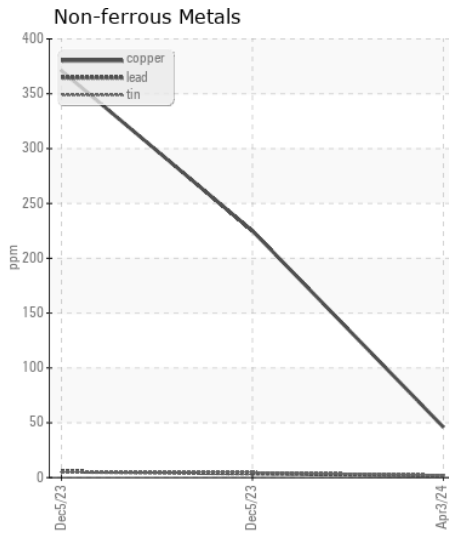
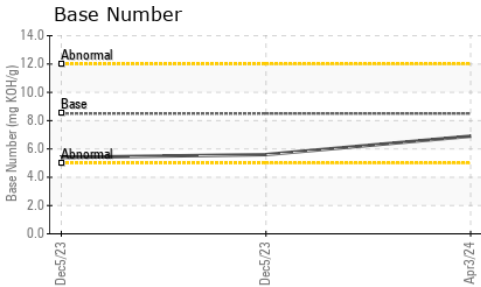
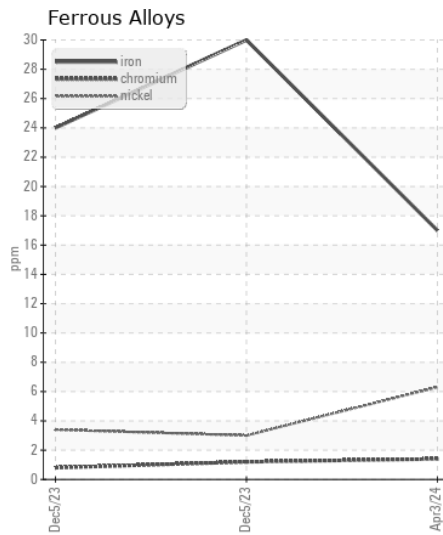
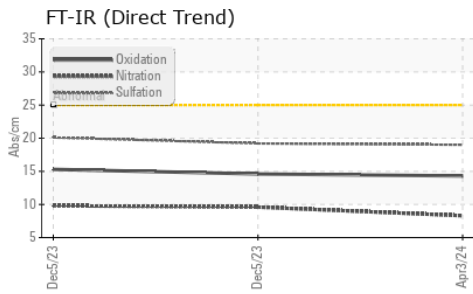
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	26	28
Potassium	ppm	ASTM D5185m	>20	2	<1	1
Fuel	%	ASTM D3524	>6.0	<1.0	0.8	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.3	9.6	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	19.2	20.1
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	0	4	5
Boron	ppm	ASTM D5185m	250	2	31	31
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	61	81	86
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m	450	824	33	29
Calcium	ppm	ASTM D5185m	3000	1030	2424	2448
Phosphorus	ppm	ASTM D5185m	1150	848	1064	1056
Zinc	ppm	ASTM D5185m	1350	1080	1193	1217
Sulfur	ppm	ASTM D5185m	4250	2767	3800	3736
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	14.6	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.9	5.6	5.4
Visc @ 100°C	cSt	ASTM D445	10.9	12.2	10.6	10.8



Certificate L2367

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

Sample No. : ASC0002543

Lab Number : 06157186

Unique Number : 10992609

Test Package : CONST (Additional Tests: FuelDilution, TBN)

Received : 23 Apr 2024

Tested : 24 Apr 2024

Diagnosed : 24 Apr 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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