



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>



Machine Id  
**VOLVO A45G 13415 (S/N 752170)**  
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		<b>ASC0008809</b>	ASC0002549	ASC0008633
Sample Date		Client Info		<b>14 May 2024</b>	03 Apr 2024	22 Feb 2024
Machine Age	hrs	Client Info		<b>1925</b>	1337	720
Oil Age	hrs	Client Info		<b>1308</b>	617	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	Changed
Filter Changed		Client Info		<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>11</b>	19	31
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	1	2
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	3	3
Titanium	ppm	ASTM D5185m		<b>0</b>	2	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	3	4
Lead	ppm	ASTM D5185m	>40	<b>2</b>	2	2
Copper	ppm	ASTM D5185m	>330	<b>30</b>	129	294
Tin	ppm	ASTM D5185m	>15	<b>2</b>	3	6
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

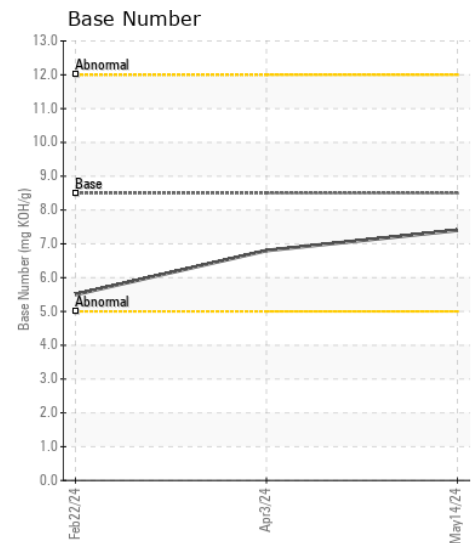
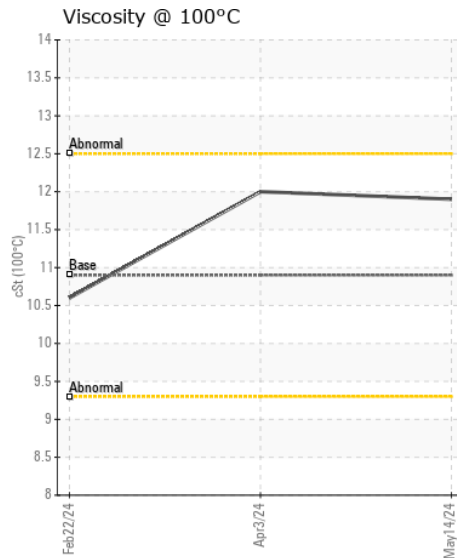
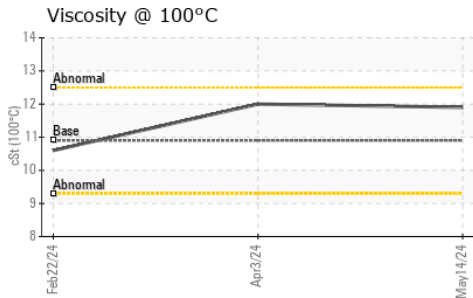
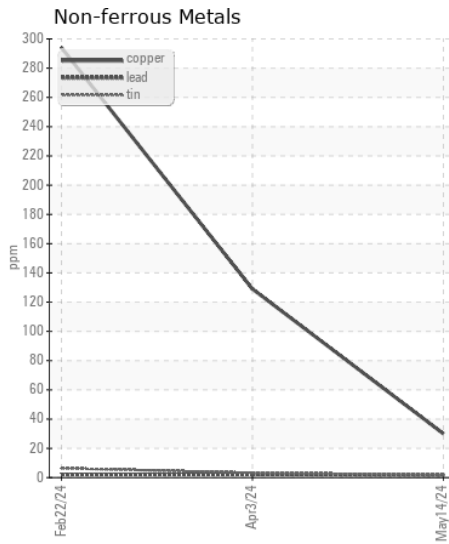
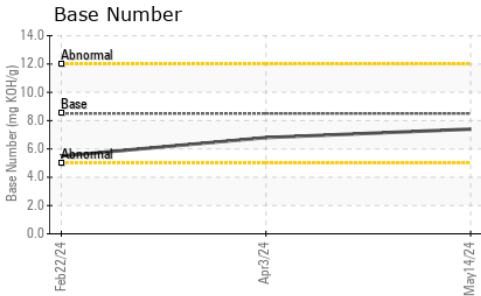
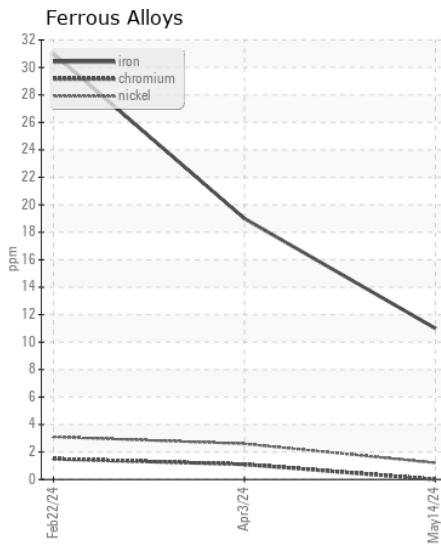
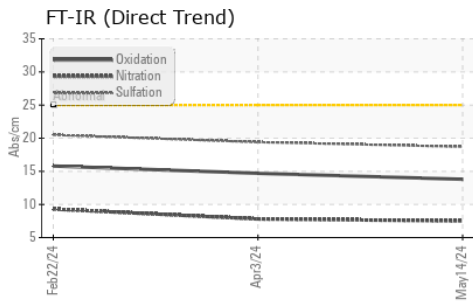
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	8	29
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	0.7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.5</b>	7.8	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.7</b>	19.4	20.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	<b>2</b>	0	3
Boron	ppm	ASTM D5185m	250	<b>2</b>	3	30
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>59</b>	65	94
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	2
Magnesium	ppm	ASTM D5185m	450	<b>887</b>	730	57
Calcium	ppm	ASTM D5185m	3000	<b>1046</b>	1143	2366
Phosphorus	ppm	ASTM D5185m	1150	<b>972</b>	805	1100
Zinc	ppm	ASTM D5185m	1350	<b>1168</b>	1072	1278
Sulfur	ppm	ASTM D5185m	4250	<b>3063</b>	2399	3859
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>13.8</b>	14.7	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.4</b>	6.8	5.5
Visc @ 100°C	cSt	ASTM D445	10.9	<b>11.9</b>	12.0	10.6



Certificate L2367

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

**Sample No.** : ASC0008809

**Lab Number** : 06193735

**Unique Number** : 11050487

**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**

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Contact: ALLEN WILLIAMS

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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)