



# ASCENDUM

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO A30G 752352**  
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		<b>ASC0004961</b>	VCP435091	VCP400199
Sample Date		Client Info		<b>03 May 2024</b>	29 Aug 2023	12 May 2023
Machine Age	hrs	Client Info		<b>4000</b>	3125	2722
Oil Age	hrs	Client Info		<b>500</b>	0	0
Filter Age	hrs	Client Info		<b>500</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>10</b>	11	17
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>5</b>	<1	<1
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>3</b>	2	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	1
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

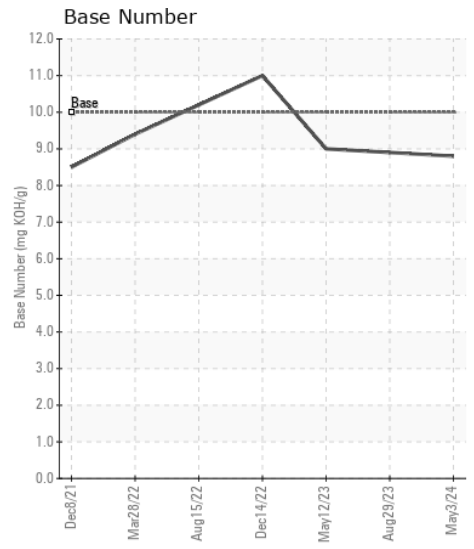
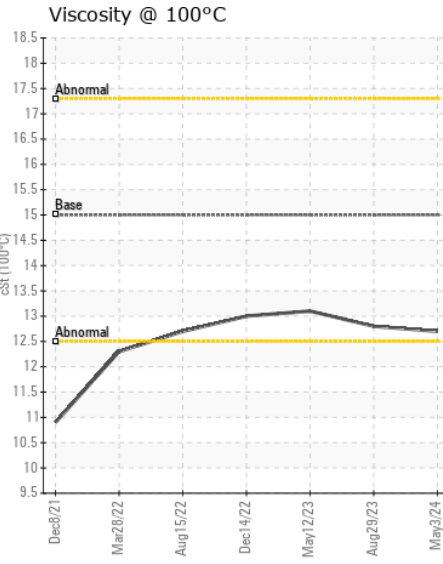
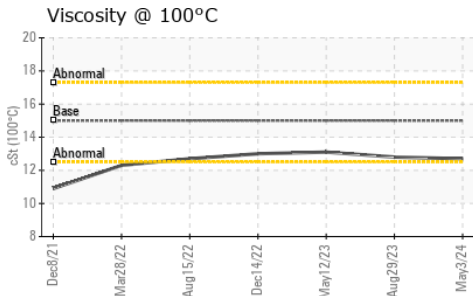
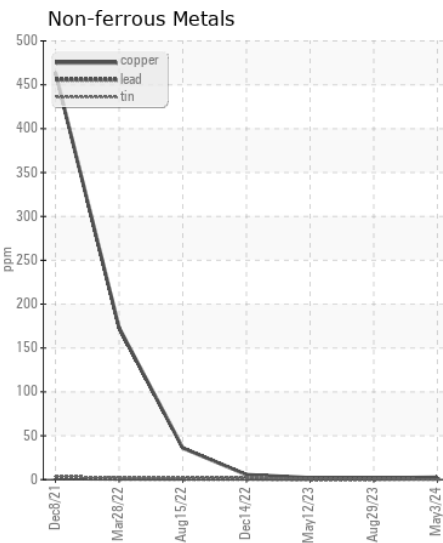
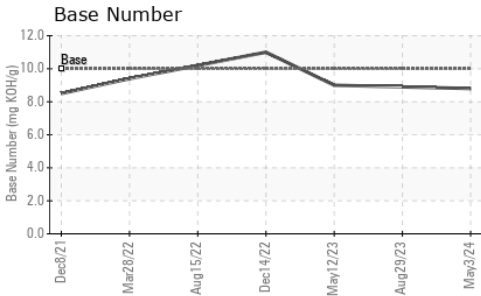
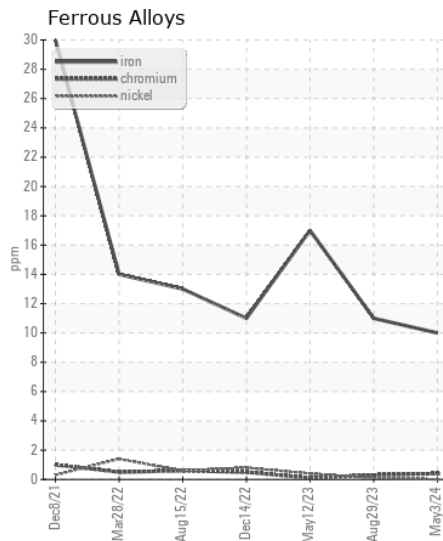
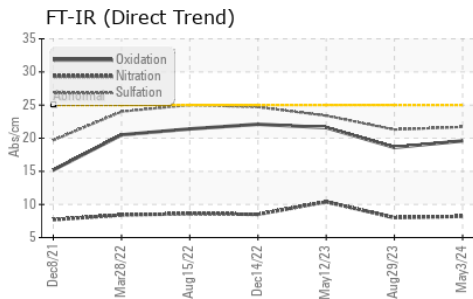
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>3</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Fuel		WC Method	>6.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.2</b>	8.0	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.7</b>	21.3	23.4
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		<b>2</b>	2	3
Boron	ppm	ASTM D5185m	2.5	<b>36</b>	23	22
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.7	<b>41</b>	36	44
Manganese	ppm	ASTM D5185m	0.0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	256	<b>501</b>	495	532
Calcium	ppm	ASTM D5185m	2057	<b>1716</b>	1813	1880
Phosphorus	ppm	ASTM D5185m	935	<b>931</b>	917	986
Zinc	ppm	ASTM D5185m	1223	<b>1063</b>	1144	1204
Sulfur	ppm	ASTM D5185m	4079	<b>3088</b>	3687	3815
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.6</b>	18.6	21.6
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>8.8</b>	8.9	9.0
Visc @ 100°C	cSt	ASTM D445	15.0	<b>12.7</b>	12.8	13.1



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0004961 **Received** : 10 May 2024  
**Lab Number** : 06175151 **Tested** : 13 May 2024  
**Unique Number** : 11021204 **Diagnosed** : 13 May 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**365 - ASCENDUM MACHINERY INC - SAVANNAH**  
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 US 31324  
 Contact: JESSE WILSON  
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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)

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