



# ASCENDUM

## OIL ANALYSIS REPORT

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

Machine Id  
**VOLVO EC350EL 314803**

Component  
**Diesel Engine**

Fluid  
**NOT GIVEN (--- 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>ASC0009180</b>	ASC0006218	---
Sample Date		Client Info		<b>11 Jul 2024</b>	07 Mar 2024	---
Machine Age	hrs	Client Info		<b>1446</b>	714	---
Oil Age	hrs	Client Info		<b>732</b>	714	---
Filter Age	hrs	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>8</b>	9	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	2	---
Copper	ppm	ASTM D5185m	>330	<b>61</b>	195	---
Tin	ppm	ASTM D5185m	>15	<b>1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

### CONTAMINATION

There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	20	---
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	---
Fuel	%	ASTM D3524	>6.0	<b>&lt;1.0</b>	0.8	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.5</b>	10.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.5</b>	21.9	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

### FLUID CONDITION

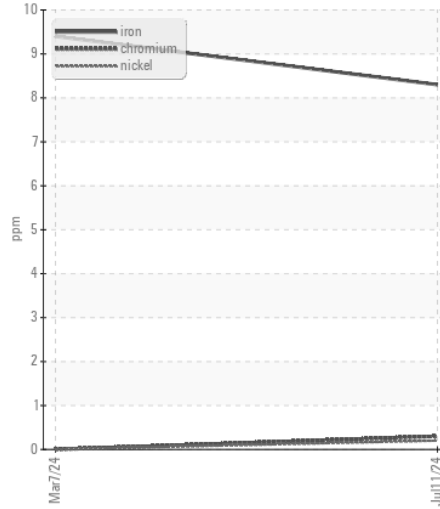
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	2	---
Boron	ppm	ASTM D5185m		<b>16</b>	51	---
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Molybdenum	ppm	ASTM D5185m		<b>67</b>	78	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	---
Magnesium	ppm	ASTM D5185m		<b>814</b>	81	---
Calcium	ppm	ASTM D5185m		<b>1261</b>	2181	---
Phosphorus	ppm	ASTM D5185m		<b>1014</b>	976	---
Zinc	ppm	ASTM D5185m		<b>1238</b>	1131	---
Sulfur	ppm	ASTM D5185m		<b>2662</b>	3887	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.1</b>	17.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>5.9</b>	4.7	---
Visc @ 100°C	cSt	ASTM D445		<b>11.9</b>	10.84	---

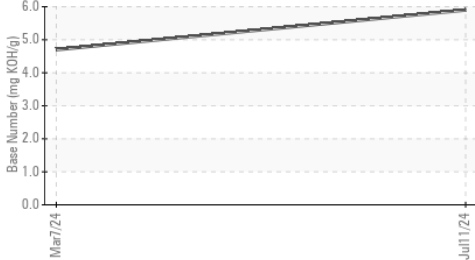
**FT-IR (Direct Trend)**



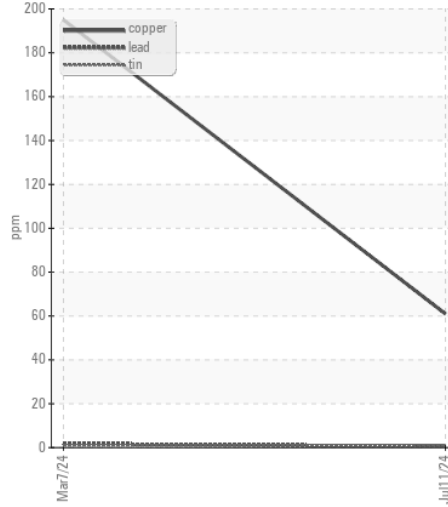
**Ferrous Alloys**



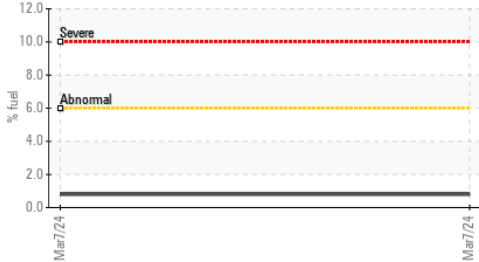
**Base Number**



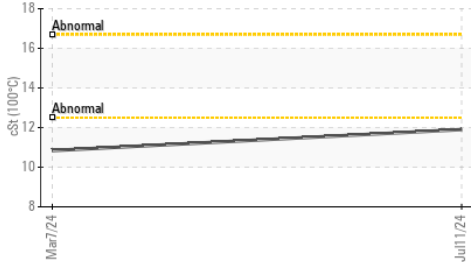
**Non-ferrous Metals**



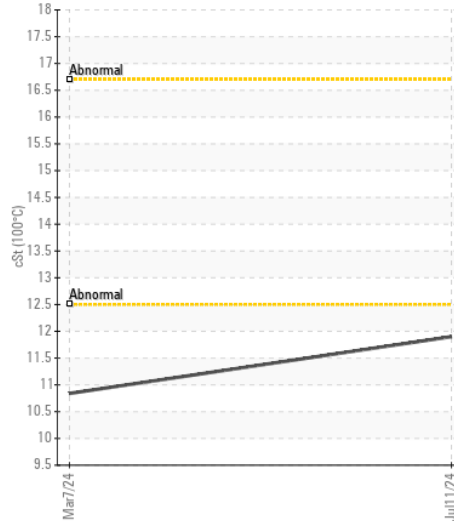
**Fuel Dilution**



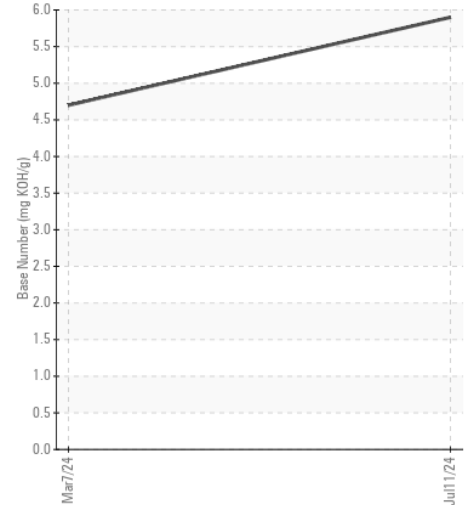
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0009180 **Received** : 16 Jul 2024  
**Lab Number** : 06238649 **Tested** : 17 Jul 2024  
**Unique Number** : 11127483 **Diagnosed** : 17 Jul 2024 - Jonathan Hester  
**Test Package** : CONST ( Additional Tests: FuelDilution, TBN )

**117 - ASCENDUM MACHINERY INC - GREENVILLE**  
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 GREENVILLE, NC  
 US 27834  
 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)

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