



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area  
**Ascendum Machinery/500 Hour CSA**

Machine Id  
**VOLVO EC220E 310445**

Component  
**Diesel Engine**

Fluid  
**{not provided} (--- 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		ASC0009534	---	---
Sample Date		Client Info		08 Jun 2024	---	---
Machine Age	hrs	Client Info		5552	---	---
Oil Age	hrs	Client Info		5552	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

### WEAR

Metal levels are typical for a components first oil change.

Iron	ppm	ASTM D5185m	>100	24	---	---
Chromium	ppm	ASTM D5185m	>10	1	---	---
Nickel	ppm	ASTM D5185m	>10	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>2	0	---	---
Aluminum	ppm	ASTM D5185m	>10	4	---	---
Lead	ppm	ASTM D5185m	>20	<1	---	---
Copper	ppm	ASTM D5185m	>15	2	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

### CONTAMINATION

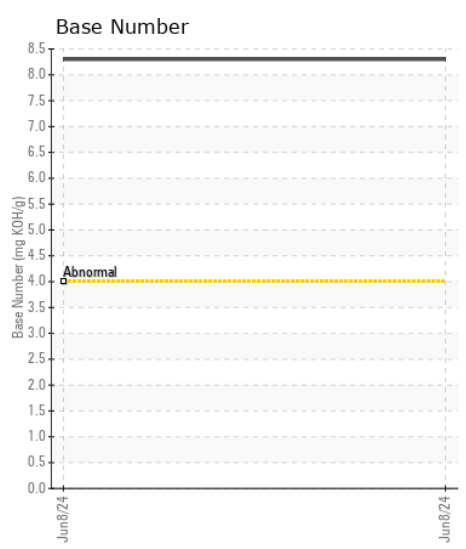
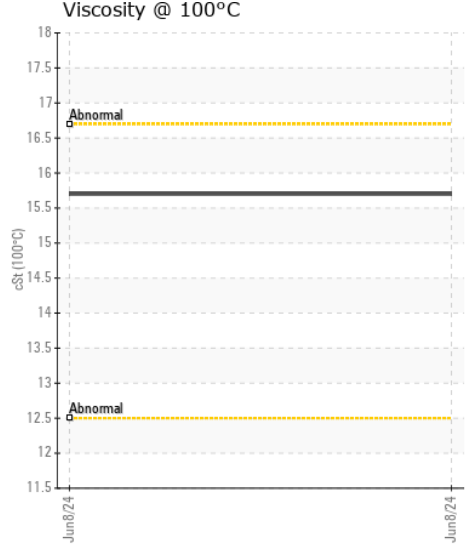
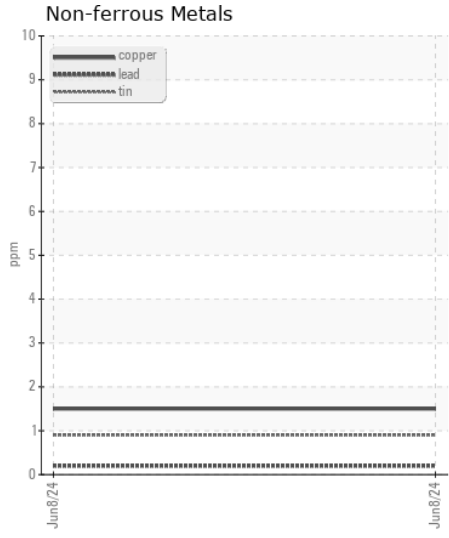
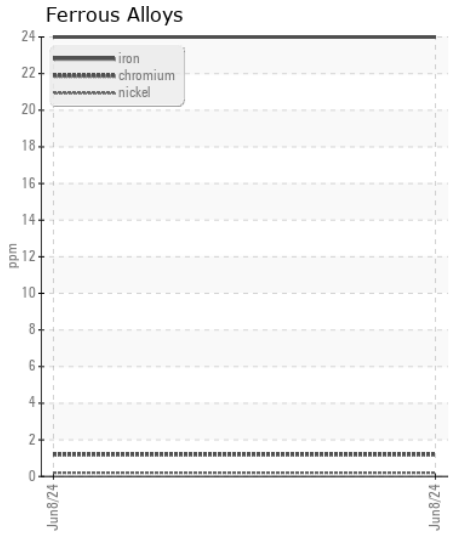
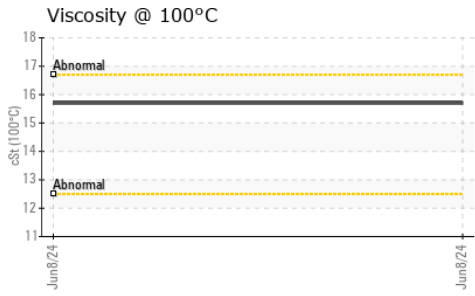
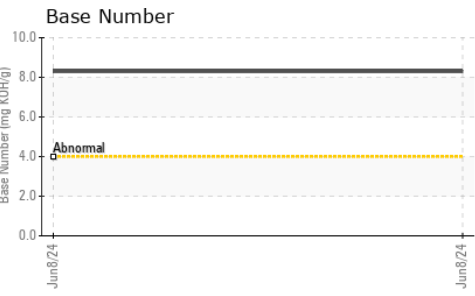
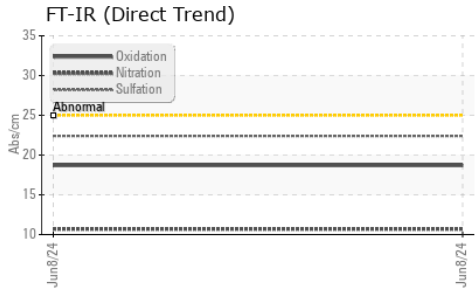
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	7	---	---
Potassium	ppm	ASTM D5185m	>20	2	---	---
Fuel		WC Method	>6.0	<1.0	---	---
Water		WC Method	>0.1	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.8	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.7	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	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		<1	---	---
Boron	ppm	ASTM D5185m		27	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		72	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		810	---	---
Calcium	ppm	ASTM D5185m		1319	---	---
Phosphorus	ppm	ASTM D5185m		956	---	---
Zinc	ppm	ASTM D5185m		1293	---	---
Sulfur	ppm	ASTM D5185m		3209	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.3	---	---
Visc @ 100°C	cSt	ASTM D445		15.7	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0009534 **Received** : 14 Jun 2024  
**Lab Number** : 06209884 **Tested** : 17 Jun 2024  
**Unique Number** : 11082748 **Diagnosed** : 17 Jun 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**TRIANGLE GRADING AND PAVING INC**  
 1521 Huffman Mill Rd  
 BURLINGTON, NC  
 US 27216  
 Contact: KAREN HILLIARD  
 khilliard@trianglegradingpaving.com

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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