



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

ATTENTION

ABNORMAL

NORMAL



Machine Id  
**VOLVO EC250 310460**  
Component  
**Rear Right Final Drive**  
Fluid  
**GEAR OIL SAE 80W90 (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0002309	ASC0010083	ASC0006189
Sample Date		Client Info		18 Jun 2024	29 Apr 2024	26 Mar 2024
Machine Age	hrs	Client Info		4027	3841	3841
Oil Age	hrs	Client Info		500	0	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	SEVERE

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	304	4	▲ 1317
Chromium	ppm	ASTM D5185m	>10	2	<1	▲ 13
Nickel	ppm	ASTM D5185m	>10	0	0	2
Titanium	ppm	ASTM D5185m		2	<1	▲ 13
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	42	2	● 326
Lead	ppm	ASTM D5185m	>25	0	0	<1
Copper	ppm	ASTM D5185m	>50	0	0	1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

### CONTAMINATION

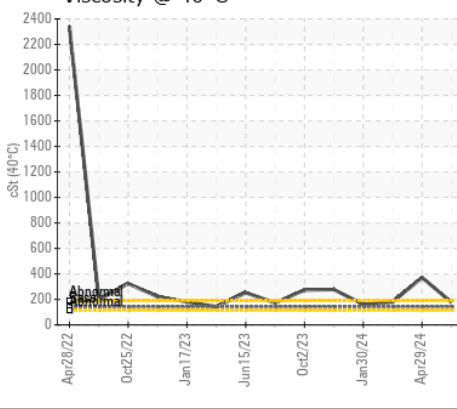
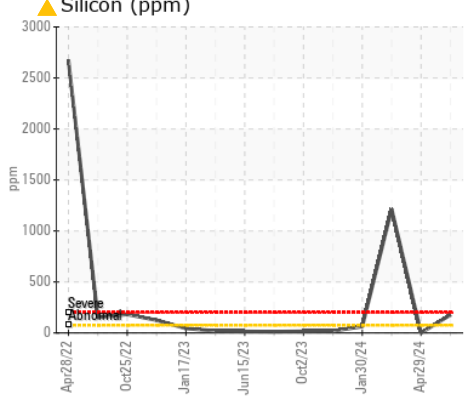
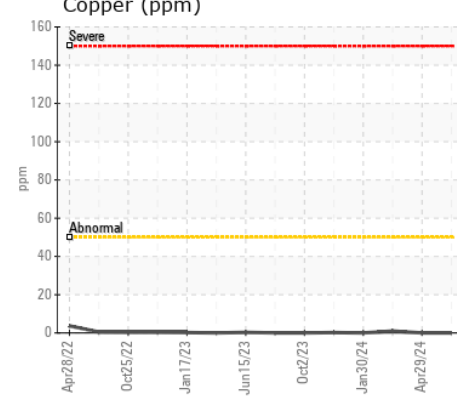
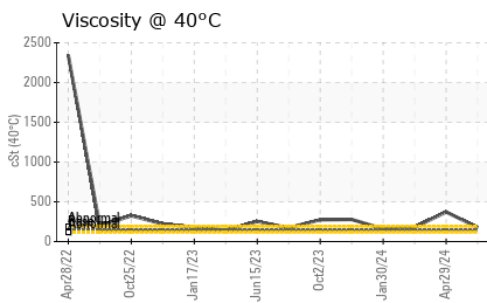
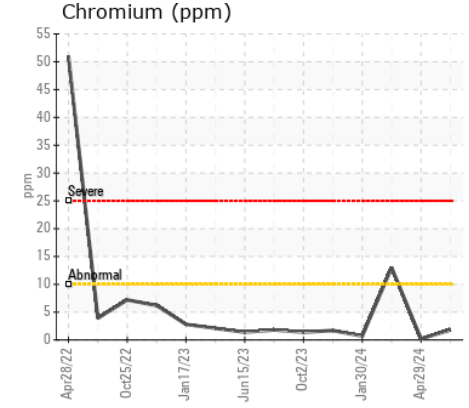
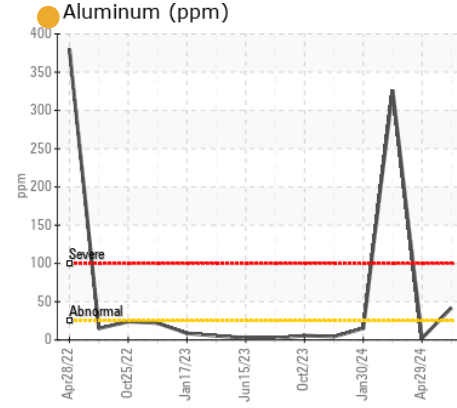
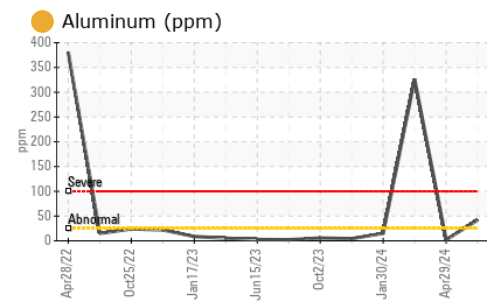
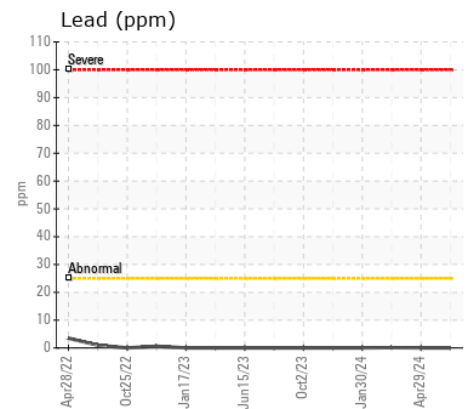
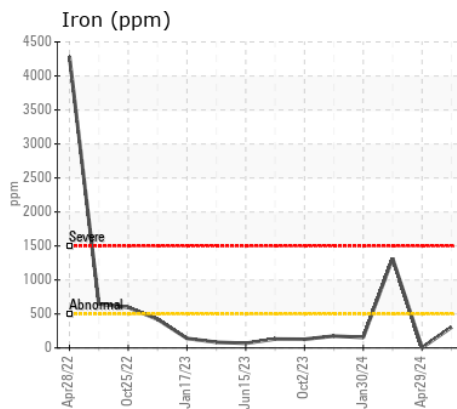
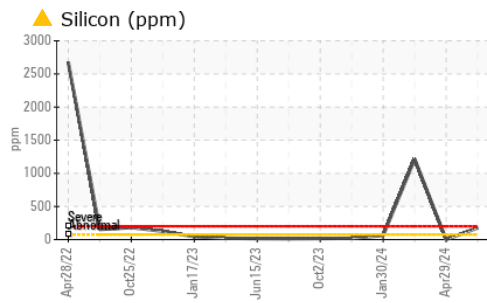
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>75	▲ 177	1	▲ 1214
Potassium	ppm	ASTM D5185m	>20	15	1	117
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	NONE	MODER
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 condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>170	13	0	85
Boron	ppm	ASTM D5185m	400	178	256	177
Barium	ppm	ASTM D5185m	200	0	0	<1
Molybdenum	ppm	ASTM D5185m	12	0	0	2
Manganese	ppm	ASTM D5185m		2	0	12
Magnesium	ppm	ASTM D5185m	12	2	<1	40
Calcium	ppm	ASTM D5185m	150	29	15	81
Phosphorus	ppm	ASTM D5185m	1650	1068	1115	1010
Zinc	ppm	ASTM D5185m	125	0	0	9
Sulfur	ppm	ASTM D5185m	22500	34047	32396	32295
Visc @ 40°C	cSt	ASTM D445	143	178	372	180



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0002309  
**Lab Number** : 06220180  
**Unique Number** : 11098377  
**Test Package** : MOBCE

**Received** : 25 Jun 2024  
**Tested** : 26 Jun 2024  
**Diagnosed** : 27 Jun 2024 - Sean Felton

**113 - ASCENDUM MACHINERY INC - GARNER**  
 3561 JONES SAUSAGE ROAD  
 GARNER, NC  
 US 27529

Contact: TRENT BROADWELL  
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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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