



# ASCENDUM

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO EC350 2130 (S/N 314011)**  
Component  
**Left Final Drive**  
Fluid  
**GEAR OIL SAE 80W140 (--- 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. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0006348	---	---
Sample Date		Client Info		23 Jan 2024	---	---
Machine Age	hrs	Client Info		3532	---	---
Oil Age	hrs	Client Info		532	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Not Chngd	---	---
Sample Status				SEVERE	---	---

### WEAR

The iron level is severe. Gear wear is indicated. Moderate concentration of visible metal present.

Iron	ppm	ASTM D5185m	>500	2179	---	---
Chromium	ppm	ASTM D5185m	>10	25	---	---
Nickel	ppm	ASTM D5185m	>10	3	---	---
Titanium	ppm	ASTM D5185m		17	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	336	---	---
Lead	ppm	ASTM D5185m	>25	<1	---	---
Copper	ppm	ASTM D5185m	>50	4	---	---
Tin	ppm	ASTM D5185m	>10	0	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	MODER	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

### CONTAMINATION

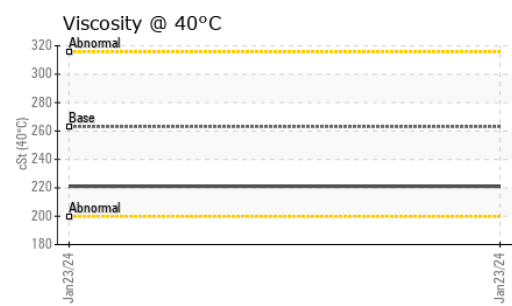
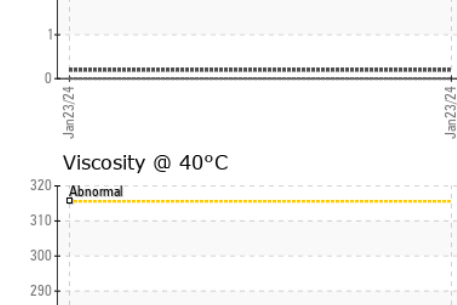
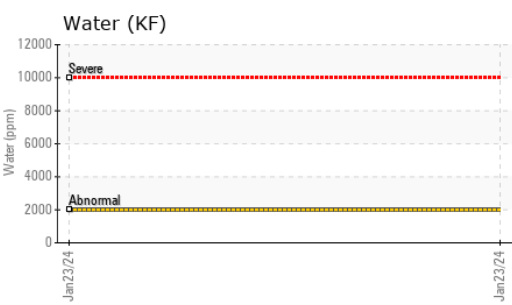
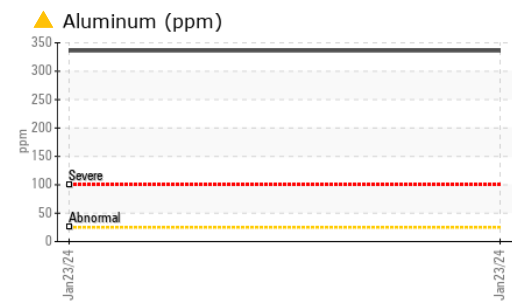
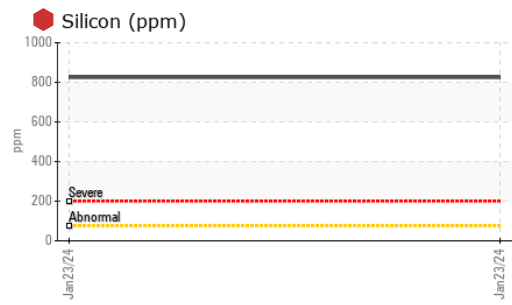
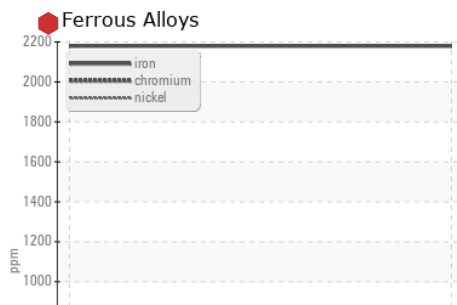
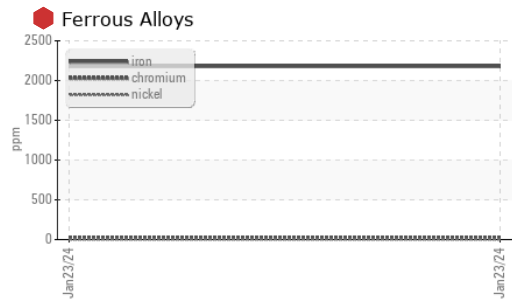
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The water content is negligible.

Silicon	ppm	ASTM D5185m	>75	825	---	---
Potassium	ppm	ASTM D5185m	>20	15	---	---
Water	%	ASTM D6304	>0.2	0.198	---	---
ppm Water	ppm	ASTM D6304	>2000	1980	---	---
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	>0.2	0.2%	---	---

### FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		21	---	---
Boron	ppm	ASTM D5185m	400	149	---	---
Barium	ppm	ASTM D5185m	200	<1	---	---
Molybdenum	ppm	ASTM D5185m	12	3	---	---
Manganese	ppm	ASTM D5185m		16	---	---
Magnesium	ppm	ASTM D5185m	12	18	---	---
Calcium	ppm	ASTM D5185m	150	70	---	---
Phosphorus	ppm	ASTM D5185m	1650	988	---	---
Zinc	ppm	ASTM D5185m	125	19	---	---
Sulfur	ppm	ASTM D5185m	22500	31808	---	---
Visc @ 40°C	cSt	ASTM D445	263	221	---	---



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0006348 **Received** : 31 Jan 2024  
**Lab Number** : 06076193 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10858284 **Diagnostician** : Sean Felton  
**Test Package** : CONST ( Additional Tests: KF )

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Certificate L2367  
 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)