



# ASCENDUM

## OIL ANALYSIS REPORT

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



Machine Id  
**VOLVO EC350E 314021**  
Component  
**Hydraulic System**  
Fluid  
**AW HYDRAULIC OIL ISO 46 (--- 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>ASC0006477</b>	VCE119092	VCP395327
Sample Date		Client Info		<b>18 Dec 2023</b>	24 May 2023	27 Dec 2022
Machine Age	hrs	Client Info		<b>6084</b>	5114	4557
Oil Age	hrs	Client Info		<b>970</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	<b>12</b>	5	3
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>2</b>	1	<1
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185m	>150	<b>19</b>	16	15
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

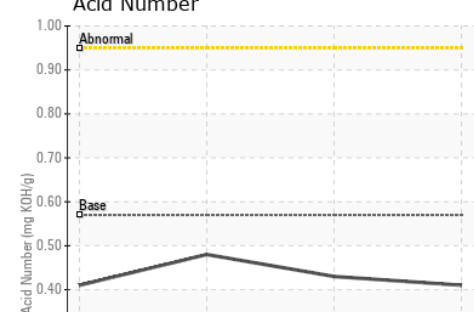
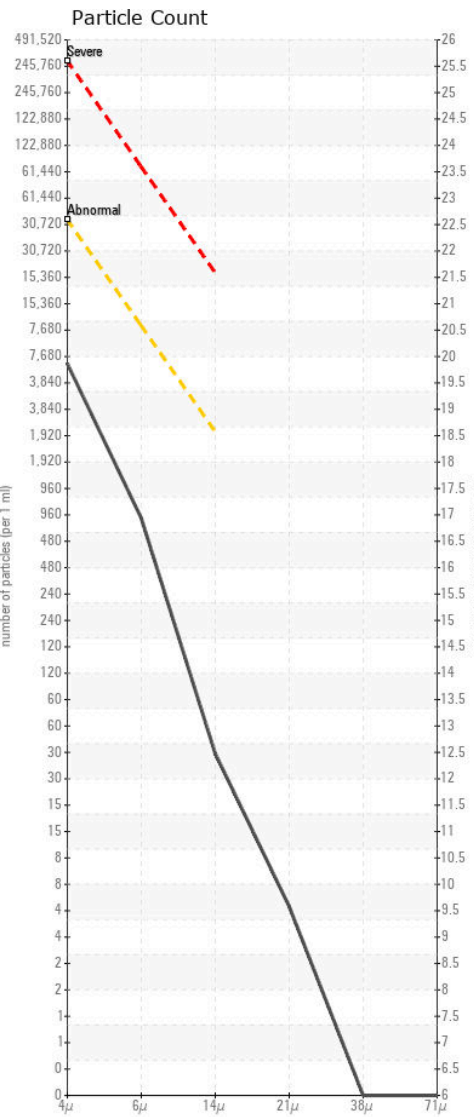
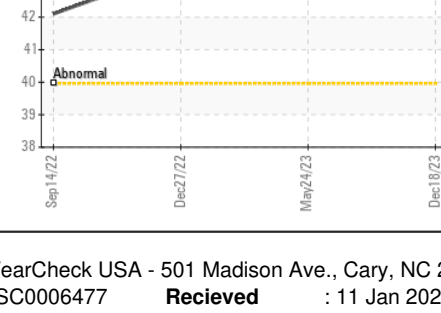
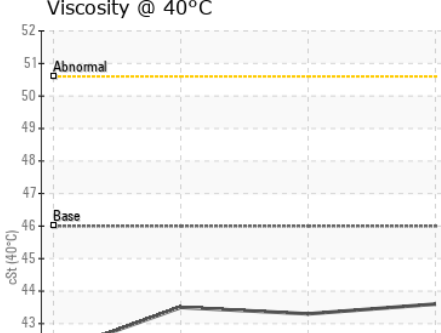
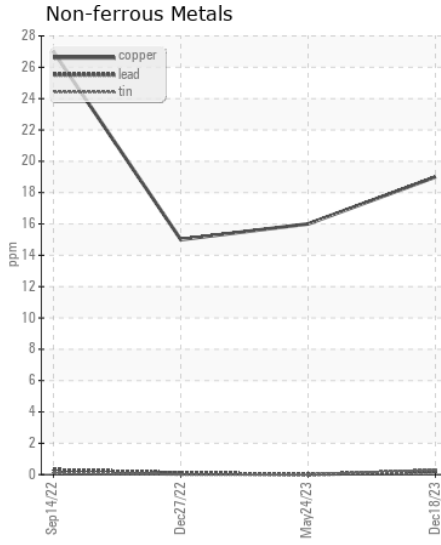
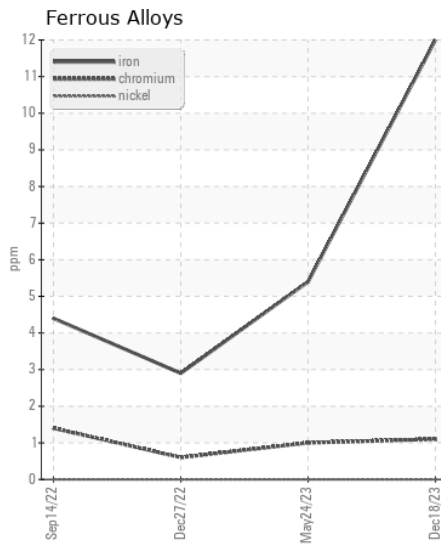
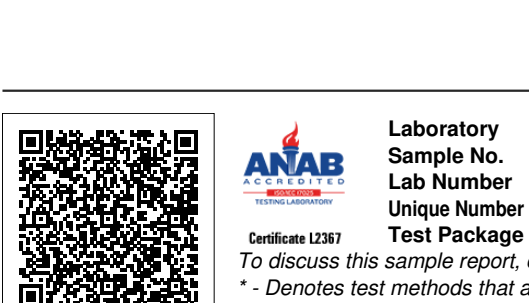
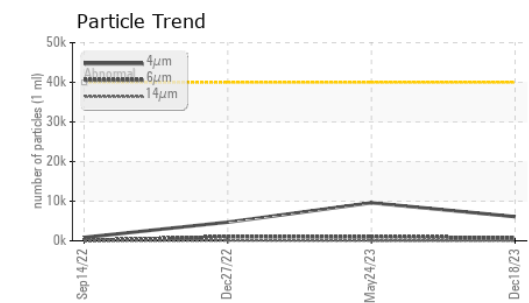
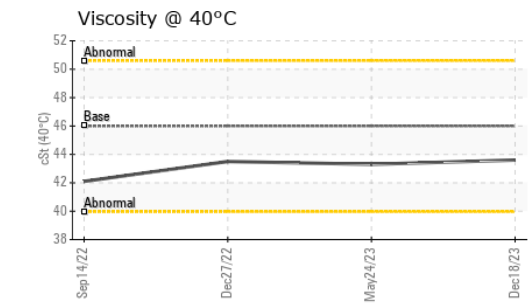
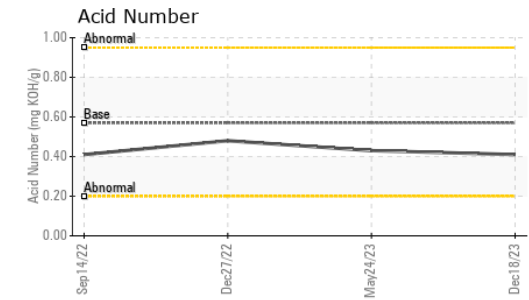
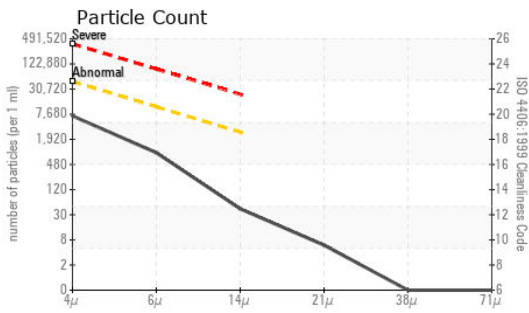
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>50	<b>4</b>	2	2
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>40000	<b>6089</b>	9597	4704
Particles >6µm		ASTM D7647	>10000	<b>805</b>	973	1043
Particles >14µm		ASTM D7647	>2500	<b>37</b>	14	76
Particles >21µm		ASTM D7647	>640	<b>5</b>	3	18
Particles >38µm		ASTM D7647	>160	<b>0</b>	0	1
Particles >71µm		ASTM D7647	>40	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>22/20/18	<b>20/17/12</b>	20/17/11	19/17/13
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	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Boron	ppm	ASTM D5185m	5	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	5	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	5	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	25	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m	200	<b>39</b>	44	43
Phosphorus	ppm	ASTM D5185m	300	<b>372</b>	369	369
Zinc	ppm	ASTM D5185m	370	<b>371</b>	418	411
Sulfur	ppm	ASTM D5185m	2500	<b>1076</b>	1190	1141
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	<b>0.41</b>	0.43	0.48
Visc @ 40°C	cSt	ASTM D445	46	<b>43.6</b>	43.3	43.5



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0006477 **Received** : 11 Jan 2024  
**Lab Number** : 06058005 **Diagnosed** : 12 Jan 2024  
**Unique Number** : 10829387 **Diagnostician** : Wes Davis  
**Test Package** : CONST

**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)